

**COLLECTIVE DOMINANCE IN EU MERGER
CONTROL: SUBSTANTIVE ISSUES**

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Abstract

This thesis focuses on collective dominance in horizontal concentrations as regulated under the EU Merger Regulation 139/2004. Chapter 1 introduces the issues that this thesis will examine. Chapter 2 focuses on the concept of collective dominance in mergers by setting out the characteristics of its analysis, its link with tacit collusion and the judgments that have formulated the conditions that must be met in order to establish such a position. Chapter 3 examines the economics of collective dominance as it demonstrates the models of oligopolistic interaction, it emphasises on the game theoretic model of tacit collusion and the related criticism, while it also focuses on the structural features that must be assessed in order to determine the oligopolists' collusive incentives. Chapter 4 emphasises on the policy considerations related to each Phase of the evolution of the collective dominance analysis and inspects the policy objectives pursued by the regulation of such positions. Chapter 5 examines the alterations brought about by the Merger Regulation 139/2004 substantive test on the appraisal of collective dominance, it focuses on the EU Horizontal Merger Guidelines' analysis of coordinated effects and makes a comparison to the approach adopted in the 2010 US Horizontal Merger Guidelines. Chapter 6 compares the concept of collective dominance under the Merger Regulation to the concepts of Article 102 collective dominance and Article 101 concerted practices by demonstrating their distinctive approach on tacit collusion. Chapter 7 scrutinizes the relationship between unilateral and coordinated effects by emphasising on their distinctions in economic theory, the set of necessary conditions required to be established and the applicability of econometric analysis. Chapter 8 highlights the proof of collective dominance in mergers as it focuses on the allocation of the burden of proof, it discerns the applicable standard of proof and examines the judicial review of the Commission's decisions. Lastly, Chapter 9 offers a conclusion on this thesis.

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Table Of Abbreviations

A.G.: Advocate General
Antitrust L.J.: Antitrust Law Journal
Cambridge J.Econ.: Cambridge Journal Of Economics
C.J.E.L.: Columbia Journal Of European Law
C.L.I.: Competition Law Insight
Comp. Law: Competition Law Journal
C.P.I.: Competition Policy International
E.B.L.R.: European Business Law Review
E.C.J.: European Competition Journal
E.C.J.: European Court Of Justice
E.C.L.R.: European Competition Law Review
E.J.L.E.: European Journal Of Law And Economics
E.L.Rev.: European Law Review
G.C.: General Court
G.C.P.: Global Competition Policy
G.C.R.: Global Competition Review
J.C.L.&E.: Journal Of Competition Law And Economics
J.I.C.T.: Journal Of Industry, Competition And Trade
J.Ind.Econ.: Journal Of Industrial Economics
T.F.E.U.: Treaty On The Functioning Of The European Union

CHAPTER 1

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INTRODUCTION

This thesis focuses on collective dominance in horizontal mergers as regulated by the EU Merger Regulation 139/2004¹. Horizontal mergers refer to concentrations between firms operating at the same level of trade, i.e. actual or potential competitors within the same relevant market². In principle, horizontal mergers are more likely to result in anticompetitive effects than non-horizontal mergers, because they reduce the number of active participants in the relevant industry and consequently they lead to an increase in market concentration. Collective dominance under the Merger Regulation is regarded as an anticompetitive position that may produce highly inefficient market outcomes and important detrimental effects on the consumers' welfare, analogous to those resulting from a cartel or a monopolistic market structure. Accordingly, the control of horizontal mergers which create or strengthen a collective dominant position is of outmost importance to the Commission and the Courts.

The EU case precedent and the relevant legislative scheme reveal that collective dominance is a legal concept which has been highly influenced by economic theory and

¹ Merger Regulation 139/2004 (Council Regulation (EC) No. 139/2004 Of 20 January 2004 On The Control Of Concentrations Between Undertakings, [2004], OJ L24/1 [2004], available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32004R0139:EN:HTML>).

² Horizontal Merger Guidelines (Guidelines On The Assessment Of Horizontal Mergers Under The Council Regulation On The Control Of Concentrations Between Undertakings, [2004], OJ C31/5 [2004], available at [http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52004XC0205\(02\):EN:HTML](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52004XC0205(02):EN:HTML)) para. 5.

policy considerations. On the one hand, the legal and economic perspectives of collective dominance in mergers are inextricably linked to the extent that the existence and exercise of a collective dominant position constitutes an economic phenomenon that exclusively takes place in oligopolies. Accordingly, the legal assessment employed in collective dominance merger cases is heavily based on economic principles. On the other hand, policy considerations have affected to a significant degree the progress of the legal analysis applied in collective dominance cases. Specifically, policy considerations have played a key role in the evolution of the analytical tools that constitute the foundation of the collective dominance merger assessment and they have also set out the objectives pursued by the regulation of such anticompetitive positions. Therefore, the framework of collective dominance under the Merger Regulation revolves around three pillars which are consisted by its legal context, the underlying economic theory and the relevant policy considerations. These pillars interact and affect the proof of collective dominance in mergers.

(A) LEGAL CONTEXT

(1) Concept, Substantive Test And Proof Of Collective Dominance

The issue of proof plays a pivotal role in the examination of mergers for collective dominance, since it determines the extent to which a case is deemed to be established as a matter of law. In that context, the concept of collective dominance is interrelated with the requirements that need to be established in order to demonstrate such a position, whilst the substantive test of the Merger Regulation sets out the threshold that must be met before a prohibition or a clearance decision is adopted.

The concept of collective dominance revolves around the notion that a concentration may lead to a fundamental change in the nature of competition on the relevant industry and

either increase the likelihood of tacit collusion or reinforce an existing situation of such collusion between the market participants post-merger. Tacit collusion constitutes anticompetitive conduct that may only be proved by evidence acquired from an economic analysis of the relevant market, as by definition there is absence of any hard evidence of the type that would facilitate the establishment of explicit collusion, whilst such conduct must be distinguished from the neighbouring notion of unconscious parallelism. In *Airtours v. Commission* the GC equated the concept of collective dominance with the economic theory of tacit collusion and presented the four cumulative and necessary conditions which must be fulfilled in order to establish such a position, whilst in *Impala v. Commission* the GC introduced the indirect test for the establishment of those conditions³. In *Sony v. Impala* the ECJ inserted the requirement that such tests should be assessed on the basis of a hypothetical coordination mechanism, whilst in *ABF/GBI* the Commission practically applied the *Airtours* test in conjunction with the *Sony* mechanism of coordination⁴.

The Merger Regulation 139/2004 along with the Horizontal Merger Guidelines consist the present EU legislative framework for the appraisal of horizontal concentrations. On the one hand, Articles 2(2) and (3) of the Merger Regulation 139/2004 modified the substantive test applicable in the assessment of the compatibility of mergers with the Common Market by adopting the ‘significant impediment to effective competition’ standard and this amendment marked an alteration of direction as the EU Merger Control system moved away from the appraisal of concentrations on the basis of the ‘dominance’ standard

³ *Airtours v. Commission* (Case T-342/99 [2002], ECR II-2585 [2002], 5 CMLR 317 [2002]) and *Impala v. Commission* (Case T-464/04 [2006], ECR II-2289 [2006], 5 CMLR 19 [2006]).

⁴ *Sony v. Impala* (Case C-413/06 [2008], ECR I-4951 [2008]) and *ABF/GBI* (Case COMP/M.4980 [2008]).

contained in Articles 2(2) and (3) of the Merger Regulation 4064/89⁵. The substantive test sets out the legal requirements that must be met in order to establish anticompetitive effects and defines the type of appraisal that should be carried out in the examination of concentrations. Accordingly, the amendment of the substantive test affected the threshold of intervention as well as the type of assessment employed in the appraisal of horizontal mergers. On the other hand, despite the fact that the Horizontal Merger Guidelines constituted soft law, they produced important legal effects, since they interpreted the manner in which the substantive test contained in the Merger Regulation 139/2004 would be practically applied. In that context, the Horizontal Merger Guidelines presented the Commission's approach in the analysis of the coordinated effects theory of harm, which corresponds to the concept of collective dominance, and set out in detail the requirements that it would seek to fulfil in order to demonstrate such an anticompetitive theory.

The individual components on the issue of proof are comprised by the burden of proof, the standard of proof and judicial review. On the one hand, in collective dominance merger cases the Commission bears the onus to prove that a concentration would 'significantly impede effective competition' by creating or reinforcing a situation of tacit collusion post-merger. On the other hand, the formulation of the standard of proof is influenced by the fact that the Commission employs an ex-ante assessment in mergers, as the predictive nature of analysis leads to the adoption of probability thresholds. Specifically, the standard of proof applicable in collective dominance merger cases is higher than a 'pure balance of probabilities' standard and takes the form of a reasonable likelihood threshold.

⁵ Merger Regulation 4064/89 (Council Regulation (EEC) No. 4064/89 Of 21 December 1989 On The Control Of Concentrations Between Undertakings, [1989], OJ L395/1 [1989], available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31989R4064:EN:HTML>).

Moreover, the Commission must bring forward ‘convincing evidence’ based upon a sound economic analysis in order to fulfil the relevant standard of proof. Also, the Courts have introduced the application of a symmetrical standard of proof between clearance and prohibition decisions in horizontal mergers which means that the Commission must meet the same evidentiary threshold in both instances. Lastly, judicial review is governed by the principle that the Courts have restrained control and they must respect the Commission’s margin of discretion when they are reviewing the correctness of its appreciation in complex economic matters.

(2) The Comparative Angle

The concept of collective dominance under the Merger Regulation is interrelated to the concepts of collective dominance under Article 102 and concerted practices under Article 101 as they can all target collusive conduct in oligopolies. Also, in the examination of horizontal concentrations two types of anticompetitive concerns may arise in the form of coordinated or unilateral effects.

The concept of collective dominance under the Merger Regulation enjoys a crucial role within the framework of EU Competition Law, as its specific focus on the ex-ante prevention of tacit collusive behaviour aimed to close the enforcement gap related to the lack of ex-post deterrence against such anticompetitive conduct by the concepts of Article 102 collective dominance and Article 101 concerted practices. The concept of concerted practices under Article 101 condemns cooperation that goes beyond formal agreements as its emphasis is on the conduct of the market participants to informal understandings between competitors. The focus of enforcement under the concerted practices concept is on the regulation of explicit collusion, whilst there is lack of emphasis against tacit collusion and this position is

inextricably linked to the legal requirements needed in order to establish concertation and the applicability of a very high evidentiary threshold. Also, even though collective dominance in mergers and Article 102 collective dominance are overlapping on the inclusion of tacit collusion within their conceptual boundaries, in the enforcement of collective dominance under Article 102 there is total lack of precedent tackling tacit collusion and this position is strongly related to the more demanding evidentiary requirements that must be demonstrated under such a provision.

The Merger Regulation 139/2004 substantive test introduced the assessment of unilateral effects in EU Merger Control and verified that coordinated effects form an integral part of merger analysis in the EU. These theories of harm are distinctive as regards the underlying economic principles and the elements that need to be fulfilled in order to establish each anticompetitive theory. Such differentiation also extends to elements of proof, as for example the demonstration of unilateral effects has been facilitated by the availability of econometric methods of analysis, whilst on the contrary there is no single accepted method of quantifying the increased likelihood of tacit collusion attendant to a merger.

(B) ECONOMIC THEORY

The legal concept of collective dominance under the Merger Regulation is based on the economic theory of tacit collusion and accordingly the examination of a concentration for the likelihood to create or strengthen a collective dominant position post-merger is carried out by the application of economic principles. Specifically, in undertaking such an assessment the Commission and the Courts heavily rely on the findings of game theory, which models oligopoly behaviour by focusing on tacit collusion and sets out the necessary conditions for the existence of collusive equilibria. Moreover, according to game theoretic dictations, the

question emphasising on whether a concentration in an oligopolistic market may lead to collusive effects depends on the nature of the oligopoly under examination, as determined by the structural characteristics of the relevant market that influence the firms' competitive conduct and such factors form the basis of the assessment focusing on whether the oligopolists would adopt and sustain a common policy of tacit collusion post-merger. Therefore, economics have provided a compass for the assessment of collective dominance in mergers. Nevertheless, the nature of game theoretic models is problematic as economic analysis based on such models does not deliver any straightforward answers and this affects the Commission's ability to legally demonstrate collective dominance.

(C) POLICY CONSIDERATIONS

The policy considerations related to the concept of collective dominance are expressed by a set of legal rules and case precedent aiming to prevent the creation or the strengthening of market structures which would give rise to tacit collusion between competitors after the completion of the concentration. Policy considerations have played a key influencing role on the evolution of the collective dominance analysis and they have gradually led to the current type of assessment that is characterised by a more economic approach, an effects-based analysis as well as the examination of a mixture of structural criteria and behavioural incentives, which reflects a more demanding examination as compared to the earlier approach employed in the assessment of collective dominance⁶.

⁶ The more economic approach refers to the increased use of industrial economic models in the assessment of mergers. The effects-based analysis focuses on the impact of a concentration on the future market structure and its competitive performance.

The policy objective that underlines the regulation of collective dominant positions in mergers focuses on the preservation of effective competition in the EU as a means to protect the consumers' welfare. Such an objective is embodied in the Merger Regulation 139/2004 and its substantive test to the extent that evidence of likely consumer harm must be demonstrated in order to prohibit a concentration. The detrimental effects of a collective dominant position on the consumers' welfare derive from the acknowledgment that a market would not be able to achieve the best possible outcome if a group of firms would implement and sustain a tacit collusive policy post-merger, since such behaviour leads to increased prices, it undermines the incentives to innovate or reduces the quality and the variety of products.

(D) RESEARCH QUESTION AND METHODOLOGY

This thesis focuses on the question of how evidential requirements and capabilities may explain the development of the concept of collective dominance under the Merger Regulation. From that perspective it employs a critical analysis of the various elements of collective dominance in mergers. Specifically, this thesis offers three different angles related to the underlying research question as it focuses on the legal requirements needed to be established in order to demonstrate the incompatibility of a concentration on the basis of collective dominance and encompasses a comparison of such a concept with relative theories, it comprises an economics part that focuses on how and the extent to which the dictations of game theory facilitate the legal establishment of collective dominance, whilst it emphasises on the policy developments that have affected the analysis of collective dominance in mergers.

The methodology used in this thesis centred on literature survey and caselaw examination. Accordingly, the sources of information comprised journal articles, books and caselaw that were collected by use of the university library and online resources, i.e. the Athens system and SSRN, while conference proceedings were attended and related material was gathered. The purpose was to accomplish an independent interpretation of such materials in order to develop a theoretical overview and a critical perspective on the issues related to the underlying research question.

This thesis focuses on collective dominance in horizontal concentrations as related to the economic theory of tacit collusion and emphasised on the relevant EU legal framework by identifying the *Airtours* judgment as a focal point in the analysis. Thus, this thesis employs an increased focus on the *Airtours* and post-*Airtours* analysis, whilst it entails limited review of the pre-*Airtours* framework and of the US scope of coordinated effects, while it offers minimal review of peripheral issues such as non-horizontal mergers.

(E) CHAPTER SUMMARY

This thesis is divided into nine Chapters. Chapter 2 focuses on the concept of collective dominance in mergers by setting out the characteristics of its analysis, its link with tacit collusion and the judgments that have formulated the conditions that need to be met in order to establish such a position. Chapter 3 examines the economics of collective dominance as it demonstrates the models of oligopolistic interaction, it emphasises on the game theoretic model of tacit collusion and the related criticism, while it also focuses on the structural features that must be assessed in order to determine the oligopolists' collusive incentives. Chapter 4 emphasises on the policy considerations related to each Phase of the evolution of the collective dominance analysis and inspects the policy objectives pursued by the regulation

of such positions. Chapter 5 examines the alterations brought about by the Merger Regulation 139/2004 substantive test on the appraisal of collective dominance, it focuses on the EU Horizontal Merger Guidelines' analysis of coordinated effects and makes a comparison to the approach adopted in the 2010 US Horizontal Merger Guidelines. Chapter 6 compares the concept of collective dominance under the Merger Regulation to the concepts of Article 102 collective dominance and Article 101 concerted practices by demonstrating their distinctive approach on tacit collusion. Chapter 7 scrutinizes the relationship between unilateral and coordinated effects by emphasising on their distinctions in economic theory, the set of necessary conditions required to be established and the applicability of econometric analysis. Chapter 8 highlights the proof of collective dominance in mergers as it focuses on the allocation of the burden of proof, it discerns the applicable standard of proof and examines the judicial review of the Commission's decisions. Lastly, Chapter 9 offers a conclusion on this thesis.

CHAPTER 2

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THE CONCEPT OF COLLECTIVE DOMINANCE UNDER THE EU MERGER REGULATION

(A) INTRODUCTION

According to economic theory, the existence of an oligopolistic market structure is not in itself problematic, since oligopolies may produce highly competitive outcomes, but under certain circumstances such markets may produce anticompetitive results and in particular where the competitors resort to collusive behaviour¹.

The EU competition legal system encompasses various tools that aim to control anticompetitive performance in oligopolies and prevent collusion between the market participants. Specifically, the Commission and the Courts have interpreted the substantive test contained in the Merger Regulation 4064/89 in such a manner as to apply to situations of collective dominance and the evolution of such a concept has authorised them to control concentrations which are likely to enable or further facilitate tacit collusion in a given

¹ J. Langer, *The Airtours Judgment: A Welcome Lecture On Oligopolies, Economics And Joint Dominance*, C.J.E.L., 2003, 10, 105-117, p. 107 and A. Winckler and M. Hansen, *Collective Dominance Under The EC Merger Control Regulation*, C.M.L.R., 1993, 30, 787-828, pp. 789-790.

oligopoly, while the concepts of collective dominance under Article 102 and concerted practices under Article 101 principally focus on explicit collusion².

This Chapter analyses the concept of collective dominance under the Merger Regulation. Section B examines the general characteristics of the collective dominance analysis in horizontal concentrations. Section C defines the relationship between collective dominance, tacit collusion and coordinated effects, as well as the differences of tacit collusion in relation to explicit collusion and mere parallel behaviour. Section D focuses on the *Airtours* cumulative criteria of a common policy, transparency, retaliation and absence of external countervailing reactions which are necessary to be fulfilled in order to reach a collective dominance finding. Moreover, it scrutinizes the *Impala* indirect test, it demonstrates the *Sony* requirement of a plausible coordination mechanism and it presents the decision in *ABF/GBI*. Lastly, Section E offers a conclusion on this subject.

(B) GENERAL CHARACTERISTICS

(1) Introduction

² D. Ridyard, Economic Analysis Of Single Firm And Oligopolistic Dominance Under The European Merger Regulation, E.C.L.R., 1994, 15(5), 255-262, p. 258, J. Briones, Economic Assessment Of Oligopolies Under The Community Merger Control Regulation, E.C.L.R., 1993, 14(3), 118-122, p. 118, B. Etter, The Assessment Of Mergers In The EC Under The Concept Of Collective Dominance – An Analysis Of The Recent Decisions And Judgments By An Economic Approach, World Competition, 2000, 23(3), 103-139, pp. 108-109, N. Petit and D. Henry, Why The EU Merger Regulation Should Not Enjoy A Monopoly Over Tacit Collusion – A Close Look At Five Common Misconceptions, In: *Changes In Competition Policy Over The Last Two Decades*, 2010, available at <http://www.uokik.gov.pl/download.php?plik=8562>, 181-197, pp. 181-183 and B. Hawk and G. Motta, Oligopolies And Collective Dominance: A Solution In Search Of A Problem, Fordham University School Of Law, 2008, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1301693, 59-104, pp. 68, 79 and 87.

Collective dominance refers to a position held by two or more independent undertakings that jointly enjoy significant market power. The appraisal of a merger for the likelihood to create or strengthen a collective dominant position is prospective in nature and centres on the fulfilment of the substantive standard for the assessment of concentrations contained in the Merger Regulation 139/2004. Also, the focus of the analysis is on the structural conditions and behavioural incentives that would prevail in the relevant market post-merger.

(2) Two Or More Parties

The concept of collective dominance does not apply to unilateral market conduct exercised by a single firm³. On the contrary, a dominant position must be held collectively by the merged entity together with one or more competing undertakings within the same relevant market⁴. In such circumstances, none of the firms is individually dominant, but the strong position on the relevant market is based on the collective exercise of market power by a group of undertakings.

(3) Market Power

³ G. Stirati, *The Appraisal Of Collective Dominance And Efficiency Gains Under The Substantive Test Of The New EU Merger Regulation*, Erasmus Law And Economic Review, 2004, 1(3), available at <http://www.eler.org/include/getdoc.php?id=44&article=12&mode>, 249–286, p. 257.

⁴ *France v. Commission (Kali and Salz)* (Cases C-68/94 and 30/95 [1998], ECR I-1375 [1998], 4 CMLR 829 [1998]) para. 221, *Gencor v. Commission* (Case T-102/96 [1999], ECR II-753 [1999], 4 CMLR 971 [1999]) para. 163, *Airtours* para. 59, *Impala* para. 245 and *Sony* para. 120. See also, A. Hinds, *The New EC Merger Regulation – The More Things Change The More They Stay The Same?*, E.B.L.R., 2006, 17(6), 1693-1713, p. 1703 and G. Elliott, *Case Comment - The Gencor Judgment: Collective Dominance, Remedies And Extraterritoriality Under The Merger Regulation*, E.L.Rev., 1999, 24(6), 638-652, p. 638.

In the assessment of collective dominance the Commission's focus is on whether the concentration under investigation would allow the remaining firms to jointly exercise market power post-merger. The legal definition of collective dominance in mergers requires that the undertakings involved must be able to prevent effective competition from being maintained in the relevant market by acting to a considerable extent independently of their competitors, their customers and their consumers⁵. Thus, the external competitive forces must be impeded to such an extent that these are unable to render the actions of the undertakings unsuccessful and confers upon them the ability to profitably set a price substantially above the competitive level⁶. Such a situation directly corresponds to the economists' notion of market power, i.e. power over price, even though the modern approach to market power extends its width to non-price factors such as quality and

⁵ *France v. Commission* para. 221, *Gencor* para. 163, *Airtours* para. 59, *Impala* para. 245, *Sony* para. 120 and Horizontal Merger Guidelines para. 2. See also, D. Geradin, P. Hoferm, F. Louis, N. Petit and M. Walker, The Concept Of Dominance In EC Competition Law, Global Competition Law Centre - Research Paper On The Modernization Of Article 82 EC, 2005, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=770144, 1-31, p. 2, F. Jenny, Collective Dominance And The EC Merger Regulation, In: *Annual Proceedings Of The Fordham Corporate Law Institute - International Antitrust Law And Policy 2001*, Edited By B. Hawk, 2002, 361-373, p. 361, M. Walker and J. Azevedo, Dominance: Meaning And Measurement, E.C.L.R., 2002, 23(7), 363-367, p. 364, H. Niemeyer, G. Drauz, F. Jenny and J. Lang, Collective Dominance/Oligopoly Behaviour Under Articles 81/82 And The EC Merger Regulation, In: *Annual Proceedings Of The Fordham Corporate Law Institute - International Antitrust Law And Policy 2001*, Edited By B. Hawk, 2002, 375-391, p. 376 and I. Kokkoris, The Development Of The Concept Of Collective Dominance In The ECMR – From Its Inception To Its Current Status, *World Competition*, 2007, 30(3), 419-448, p. 422.

⁶ J. Lang, Oligopolies And Joint Dominance In Community Antitrust Law, In: *Annual Proceedings Of The Fordham Corporate Law Institute - International Antitrust Law And Policy 2001*, Edited By B. Hawk, 2002, 269-359, pp. 317-318.

innovation⁷. Also, mere external stability is not sufficient for the collective exercise of market power, as internal stability is necessary to the extent that each firm's profits depend not only on its own actions but also on the actions of the other oligopolists comprising the collective group⁸. Lastly, it should be emphasised that market power is a question of degree, since the goal of EU Merger Control in collective dominance cases is to prevent the build-up of significant, as opposed to marginal, market power⁹.

(4) The Creation Or Strengthening Of Collective Dominance And The Prospective Analysis

Article 2(3) of the Merger Regulation 139/2004 prohibits concentrations that would significantly impede effective competition through the creation or the strengthening of a collective dominant position post-merger¹⁰. Therefore, the Commission's appraisal focuses on whether a concentration may significantly impede effective competition either by increasing the likelihood of coordination between the oligopolists post-merger, i.e. the

⁷ *Sony* para. 121 and Horizontal Merger Guidelines para 8. See also, D. Geradin et al., above note 5, pp. 3 and 5, F. Mezzanotte, Tacit Collusion As Economic Links In Article 82 EC Revisited, E.C.L.R., 2009, 30(3), 137-142, p. 138, M. Walker and J. Azevedo, above note 5, p. 366, C. Caffarra and J. Ysewyn, Case Comment - Two's Company, Three's A Crowd: The Future Of Collective Dominance After The *Kali & Salz* Judgment, E.C.L.R., 1998, 19(7), 468-472, p. 469 and D. Ridyard, Joint Dominance And The Oligopoly Blind Spot Under The EC Merger Regulation, E.C.L.R., 1992, 13(4), 161-164, p. 161.

⁸ L. White, Market Power: How Does It Arise? How Is It Measured?, 2012, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2056708, 1-50, p. 14.

⁹ Horizontal Merger Guidelines para. 8. See also, D. Geradin et al., above note 5, p. 4 and A. Amelio, P. Asbo, M. De La Mano, R. Maximiano and V. Porubsky, *ABF/GBI* Business: Coordinated Effects Baked Again, Competition Policy Newsletter, 2009, available at http://ec.europa.eu/competition/publications/cpn/2009_1_22.pdf, 91-96, p. 91.

¹⁰ Horizontal Merger Guidelines para. 39.

‘creation’ of collective dominance, or by reinforcing an existing situation of coordination between the market participants after its completion, i.e. the ‘strengthening’ of collective dominance.

In assessing the creation of collective dominance, the Commission must determine whether the merger changes the ability and the incentive of the oligopolists to collude so that ‘firms that previously were not coordinating their behaviour, are now significantly more likely to coordinate’¹¹. Specifically, the Commission must prove that the particular concentration under investigation causes a significant alteration in the future market structure, which influences the firms’ behaviour and increases the likelihood of coordination, in order to establish that the merger leads from a competitive environment pre-merger to collective dominance post-merger¹². In such a case the level of competition at the time of notification of the concentration is taken into account, but the principal focus is on the post-merger market structure¹³.

The strengthening of collective dominance refers to the situation where ‘a merger may make coordination easier, more stable or more effective for firms which were

¹¹ Horizontal Merger Guidelines paras 22 and 39.

¹² G. Robert and C. Hudson, Past Coordination And The Commission Notice On The Appraisal Of Horizontal Mergers Under The Council Regulation On The Control Of Concentrations Between Undertakings, E.C.L.R., 2004, 25(3), 163-168, p. 163.

¹³ *Airtours* paras 59, 63 and 82 and *Impala* para. 250. See also, A. Nikpay and F. Houwen, Case Comment - Tour De Force Or A Little Local Turbulence? A Heretical View On The *Airtours* Judgment, E.C.L.R., 2003, 24(5), 193-202, p. 199.

coordinating prior to the merger'¹⁴. In such cases the market is characterised by a degree of coordination between the competitors pre-merger and the concentration has the effect of reinforcing such collusive behaviour post-merger¹⁵. The examination of the strengthening of collective dominance mandates an actual-based analysis of the market position of the undertakings at the time of the adoption of the decision and the past conduct of the firms, but again the principal emphasis is on a prospective outlook of the future market structure¹⁶.

Thus, the analysis of both the creation and the strengthening of collective dominance in mergers is prospective in nature, since the Commission examines the pre-merger market structure in order to assess ex-ante whether the proposed concentration would increase the likelihood of or reinforce coordination between the remaining firms post-merger¹⁷.

(5) The Nature Of The Commission's Assessment

Two further characteristics constitute the core of the legal assessment employed in collective dominance merger cases. Firstly, the compatibility of concentrations with the Common Market is appraised on the basis of the threshold level contained in Article 2(3) of

¹⁴ Horizontal Merger Guidelines paras 22 and 39. See also, F. Mezzanotte, Direct Versus Indirect Proof Of The *Airtours* Criterion In *Impala*, *World Competition*, 2008, 31(4), 523-540, p. 528.

¹⁵ G. Robert and C. Hudson, above note 12, p. 163.

¹⁶ *Impala* para. 250. See also, I. Kokkoris, Assessment Of Mergers Inducing Coordinated Effects In The Presence Of Explicit Collusion, *World Competition*, 2008, 31(4), 499-522, p. 505 and G. Aigner, O. Budzinski and A. Christiansen, The Analysis Of Coordinated Effects In EU Merger Control: Where Do We Stand After *Sony/BMG And Impala?*, E.C.J., 2006, 2(2), 311-336, p. 326.

¹⁷ *France v. Commission* para. 221, *Airtours* paras 59 and 63, *Impala* paras 245, 522 and 532, *Sony* para. 120 and *ABF/GBI* para. 146.

the Merger Regulation 139/2004, which prohibits concentrations that would ‘significantly impede effective competition’¹⁸. Accordingly, the maintenance of ‘effective competition’ is the basic legal standard according to which a merger examined for collective dominance will be assessed and this appraisal is a matter of degree as only the ‘significant’ impediment of such competition will be prohibited¹⁹. Secondly, the Commission’s assessment entails a case-by-case analysis of the structural features of the relevant market that affect the probable strategic behaviour of the oligopolists, in order to examine whether these parameters enhance the scope for the remaining firms to attain and sustain a collusive outcome post-merger²⁰.

(C) TACIT COLLUSION

(1) Introduction

The Commission must prove that the market participants would tacitly collude post-merger in order to establish collective dominance. Tacit collusion is an economic theory which provides that in markets with certain oligopolistic characteristics the competitors may adopt a parallel behaviour and collectively exercise market power, without entering into an

¹⁸ Note also the discussion on the substantive standard under the Merger Regulation 139/2004 at Ch. 5.

¹⁹ J. Lang, above note 6, pp. 272 and 316.

²⁰ *France v. Commission* para. 222, *Airtours* para. 63, *Impala* para. 248 and Horizontal Merger Guidelines para. 13. Note also the discussion on the structural market features and their influence on the firms’ behaviour at Ch. 3. See also, A. Winckler and M. Hansen, above note 1, p. 790, I. Kokkoris, above note 5, p. 426, E. Kloosterhuis, Joint Dominance And The Interaction Between Firms, E.C.L.R., 2001, 22(3), 79-92, p. 80, D. Geradin et al., above note 5, p. 10, H. Haupt, Collective Dominance Under Article 82 E.C. And E.C. Merger Control In The Light Of The *Airtours* Judgment, E.C.L.R., 2002, 23(9), 434-444, pp. 443-444, I. Kokkoris, The Reform Of The European Control Merger Regulation In The Aftermath Of The *Airtours* Case - The Eagerly Expected Debate: SLC v. Dominance Test, E.C.L.R., 2005, 26(1), 37-47, p. 47 and F. Bektashi, *Collective Dominance In EC Competition Law: Role Of Structural Links - Case Law Analysis Under The EC Merger Regulation*, VDM Verlag, First Edition, 2008, p. 29.

agreement or resorting to a concerted practice, but through recourse to implicitly collusive conduct²¹. The implementation of such behaviour results in the collective maximization of profits for the colluding firms, by avoiding effective competition in their internal relationship and by eliminating competition from their external competitive forces²².

(2) Collective Dominance v. Tacit Collusion And Coordinated Effects

The basic principle underlying the concept of collective dominance in horizontal concentrations is consisted by the economic theory of tacit collusion²³. Also, the concept of collective dominance corresponds to the coordinated effects theory of harm²⁴.

In *Gencor v. Commission* the GC identified for the first time the concept of collective dominance in mergers with the theory of tacit collusion, as it referred to the rivals' alignment of conduct by the recognition of their interdependence and in the absence of an

²¹ S. Baxter and F. Dethmers, *Collective Dominance Under EC Merger Control - After Airtours And The Introduction Of Unilateral Effects Is There Still A Future For Collective Dominance?*, E.C.L.R., 2006, 27(3), 148-160, p. 149, I. Kokkoris, above note 16, pp. 499-500 and F. Mezzanotte, *Can The Commission Use Article 82 EC To Combat Tacit Collusion?*, CCP Working Paper 09-5, 2009, available at http://www.uea.ac.uk/polopoly_fs/1.111282!ccp09-5.pdf, 1-36, p. 7.

²² *Airtours* para. 63. See also, J. Lang, above note 6, pp. 269 and 314 and F. Mezzanotte, above note 21, p. 6.

²³ Note also the discussion on the economic theory of tacit collusion at Ch. 3. See also, J. Langer, above note 1, p. 108, T. Kaseberg, *Bertelsmann AG And Sony Corporation Of America v. Independent Music Publishers And Labels Association (Impala)*, C.M.L.R., 2009, 46, 255-267, p. 260, F. Mezzanotte, above note 14, pp. 524-525, S. Stroux, *US And EC Oligopoly Control*, Kluwer, First Edition, 2004, p. 220 and J. Vickers, *Competition Economics And Policy*, E.C.L.R., 2003, 24(3), 95-102, p. 101.

²⁴ M. Motta, *E.C. Merger Policy And The Airtours Case*, E.C.L.R., 2000, 21(4), 199-207, p. 203 and S. Bishop and D. Ridyard, *Prometheus Unbound: Increasing The Scope For Intervention In EC Merger Control*, E.C.L.R., 2003, 24(8), 357-363, p. 358.

agreement or a concerted practice, while it also focused on the retaliatory reaction of the collusive group to a firm's deviatory action²⁵. Nonetheless, the Commission in *Airtours/First Choice* departed from this approach, since it did not rely on tacit collusion as the economic theory underlying the concept of collective dominance. In particular, the Commission focused exclusively on the degree of interdependence between the oligopolists and on the rational incentives of the undertakings to avoid or reduce competition among themselves, whilst it ruled out the strict necessity of retaliation in the event of deviation and accordingly it attempted to expand the scope of the concept of collective dominance so as to apply not only to tacit collusive behaviour, but also to the unilateral non-collusive exercise of market power²⁶. The GC's judgment in *Airtours* rejected this misapplication of the concept of collective dominance by clearly departing from the Commission's views and restored tacit collusion as its central economic theory²⁷. Specifically, the GC held that collective

²⁵ *Gencor* paras 276-277. See also, K. Kuhn and C. Caffara, Joint Dominance: The CFI Judgment On *Gencor/Lonrho*, E.C.L.R., 1999, 20(7), 355-359, p. 356, G. Niels, Collective Dominance: More Than Just Oligopolistic Interdependence, E.C.L.R., 2001, 22(5), 168-172, p. 168, Ş. Ardiyok, Comparative Analysis Of Collective Dominance, 2006, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1162187, 1-39, pp. 27-28 and I. Kokkoris, above note 16, p. 500.

²⁶ *Airtours/First Choice* (Case IV/M.1524 [1999], OJ L93/1 [2000], 5 CMLR 494 [2000]) paras 53-55 and 150. See also, I. Kokkoris, above note 5, p. 434, A. Nikpay and F. Houwen, above note 13, pp. 200-201, J. Briones and A. Padilla, The Complex Landscape Of Oligopolies Under EU Competition Policy – Is Collective Dominance Ripe For Guidelines?, *World Competition*, 2001, 24(3), 307-318, pp. 307 and 310-312, F. Jenny, above note 5, pp. 367-368, V. Rabassa and P. Christensen, The *Airtours* Decision: Is There A New Commission Approach To Collective Dominance?, E.C.L.R., 2001, 22(6), 227-237, pp. 228 and 235, S. Stroux, Is EC Oligopoly Control Outgrowing Its Infancy?, *World Competition*, 2000, 23(1), 3-50, pp. 39-40, J. Langer, above note 1, pp. 108-110 and B. Etter, above note 2, pp. 133 and 135-136.

²⁷ *Airtours* para. 61. See also, J. Langer, above note 1, pp. 106 and 116, F. Mezzanotte, above note 14, p. 530 and I. Kokkoris, above note 5, p. 439.

dominance should be understood as a situation in which a merger creates a risk of tacit collusion, thereby unifying these two theories by an integral link of causation, i.e. tacit collusion functions as the underlying condition for a collective dominance finding, and clarifying that unilateral non-collusive conduct cannot be examined under the concept of collective dominance²⁸.

Also, in *Airtours* the GC essentially identified and the subsequent Horizontal Merger Guidelines upheld the notion that the concept of collective dominance and the coordinated effects theory of harm closely correspond to each other²⁹. In particular, the concept of collective dominance reflects the theory of coordinated effects, as they are both based on the establishment of tacit collusion and accordingly they refer to identical market behaviour. Thus, collective dominance arises as a result of a merger giving rise to an increased risk of tacit coordination after its completion and a concentration is characterised as generating coordinated effects if it significantly increases the likelihood of tacit collusion between the oligopolists post-merger.

(3) Tacit Collusion v. Explicit Collusion

²⁸ R. Whish, Analytical Framework Of Merger Review - Substantial Lessening Of Competition/Creation Or Strengthening Of Competition, ICN First Annual Conference, 2002, available at <http://www.internationalcompetitionnetwork.org/uploads/library/doc565.pdf>, 1-4, p. 2 and S. Albaek, P. Møllgaard and P. Overgaard, Transparency And Coordinated Effects In European Merger Control, 2010, available at http://www.cresse.info/uploadfiles/2010_S4.5_Paper.pdf, 1-7, p. 3.

²⁹ Horizontal Merger Guidelines paras 39-57. Note also the discussion on the analysis of coordinated effects in the Horizontal Merger Guidelines at Ch. 5. See also, A. Nikpay and F. Houwen, above note 13, p. 197 and S. Albaek et al., above note 28, p. 3.

The current formation of the concept of collective dominance under the Merger Regulation is in principle concerned with the possibility of tacit as opposed to explicit collusion. This is evident by the judgments in *Gencor*, *Airtours* and *Impala* which held that in analysing collective dominance the Commission should prove that the firms involved can plausibly carry out the alleged coordination by adopting and sustaining a tacit collusive strategy post-merger. This position holds firm, despite the ECJ's obiter dictum in *Sony* that seemingly integrated explicit collusion as a type of coordinated conduct leading to a collective dominance finding.

As regards the relationship between the two forms of collusion, tacit collusion concerns market behaviour that appears to be explicit collusion in that the firms act 'as if' they had expressly colluded and the outcome is similar in both types of collusion, since it consists of increased prices and/or reduced output³⁰. However, tacit differs from explicit collusion in relation to the form by which the undertakings enter into the common strategy of coordination. In particular, explicit collusion involves a concrete agreement concluded between rivals or a concerted practice formed by contacts between competitors, while tacit collusion involves a self-enforcing mechanism which results in the coordination of the firms' market behaviour simply by observing and anticipating the conduct of their rivals and in the absence of any direct or indirect contact or any kind of agreement between them³¹. It follows that from a legal perspective there are different requirements of proof in order to demonstrate explicit as opposed to tacit collusion. Specifically, the Commission must produce direct or

³⁰ O. Odudu, Case Comment - Collective Dominance Clarified?, Cambridge Law Journal, 2004, 63(1), 44-46, p. 45 and O. Black, Collusion And Coordination In EC Merger Control, E.C.L.R., 2003, 24(8), 408-411, p. 408.

³¹ *Gencor* para. 277, *Airtours* para. 61, *Impala* para. 246 and *Sony* para. 122. See also, V. Rabassa and P. Christensen, above note 26, p. 228 and Ş. Ardiyok, above note 25, p. 5.

hard evidence of an agreement or a concerted practice in order to establish explicit collusion, whereas tacit collusion can only be inferred indirectly by analysing the relevant market conditions which affect the likely future behaviour of the undertakings in terms of their ability and incentives to coordinate on a sustainable basis³². This material difference highlights the point that tacit collusion is a more sophisticated form of coordination when compared to explicit collusion, because it produces no hard evidence and this makes its detection more difficult for the Commission³³.

Despite the established EU precedent, which has recognised the present status of collective dominance under the Merger Regulation with tacit collusive behaviour, in *Sony* the ECJ attempted to expand the legal theory of collective dominance by the inclusion of explicit collusion within its conceptual boundaries. In particular, even though the ECJ recognised that tacit collusion constitutes the principal economic theory behind collective dominance, it held that ‘unless they can form a shared tacit understanding of the terms of the coordination, competitors might resort to practices that are prohibited by Article 101 in order to be able to adopt a common policy on the market’³⁴. Thus, the ECJ suggested that, as an alternative to tacit collusion, the Commission may reach a collective dominance finding on the basis of explicit collusion formed by an agreement or a concerted practice. Nonetheless, two principal considerations limit the value of the ECJ’s statement. On the one hand, such a situation may arise only where the Commission assesses the strengthening of a collective dominant position. Specifically, in a merger appraisal focusing on the creation of collective dominance, the Commission would be unable to prove by an ex-ante assessment and at the required

³² *ABF/GBI* para. 140. See also, A. Amelio et al., above note 9, p. 92.

³³ *ABF/GBI* para. 140. See also, A. Amelio et al., above note 9, pp. 92-93.

³⁴ *Sony* para. 123.

standard of proof that a concentration in a competitive market pre-merger would lead to explicit collusion by the de novo formation of an agreement or a concerted practice between the oligopolists post-merger. Therefore, in a prospective assessment it would be impossible to demonstrate that explicit collusion would be the cause of the creation of a collective dominant position, because there would be lack of any hard evidence at the Commission's disposal. Conversely, two marginal scenarios may be identified where explicit collusion may be established and lead to a finding of the strengthening of a collective dominant position. Firstly, such a situation may materialize where there is a history of past explicit collusion in the market and the Commission proves that this type of anticompetitive behaviour is feasible to reoccur post-merger, provided that at the time of notification of the concentration the market circumstances have not been substantially altered from the previous occasion of collusion, i.e. there is a degree of coordination between the market participants³⁵. Secondly, the Commission may establish the strengthening of collective dominance where at the time of completion of the concentration there are links between the competitors in the form of agreements or concerted practices within the meaning of Article 101(1), which are likely to lead to a concrete explicit collusive policy post-merger and the structural characteristics of the relevant market would be favourable towards such an outcome. On the other hand, the value of the ECJ's statement on explicit collusion is limited by the fact that it was only an obiter dictum and it was also unrelated to the circumstances of the case which focused exclusively on tacit collusion. Lastly, a peripheral consideration concerns the fact that the Commission's ability and incentive to establish explicit collusion is diminished by the limited time frame within which it is obliged to collect the relevant hard evidence in merger investigations, whilst the mere undertaking of an economic analysis entailed under tacit

³⁵ Note also the discussion on past explicit collusion as a factor relevant in the assessment of coordinated effects at Ch. 3.

collusion would be more suitable in that regard, and also by the reason that ex-post enforcement is fully capable to capture express (in contrast to tacit) collusion. Overall, the *Sony* dictum should be interpreted as merely opening up the theoretical and rather marginal possibility to establish collective dominance in mergers on the basis of explicit collusion. Accordingly, the present position in EU Merger Control still holds that collective dominance principally refers to and encompasses situations of tacit collusion.

(4) Tacit Collusion v. Mere Parallel Behaviour

In the absence of explicit collusion, parallelism in an oligopolistic market post-merger may be explained by two alternative hypotheses: firms may either adopt a non-collusive conduct of unconscious parallelism, i.e. mere parallel behaviour, or they may tacitly collude³⁶. In order to establish collective dominance, the Commission must positively prove that tacit collusion would be the cause of parallelism in the relevant market as opposed to mere parallel behaviour.

The theory of interdependence occupies a central role in the analysis of oligopolies, as it asserts that in any oligopolistic market there is a tendency between the rivals to parallel their conduct due to the particular structure of such markets, i.e. a small number of firms and a high degree of concentration, which prevents the undertakings to set their prices by totally disregarding their competitors³⁷. Therefore, each oligopolist must consider the behaviour of

³⁶ F. Mezzanotte, above note 21, p. 8.

³⁷ F. Jenny, above note 5, p. 367, B. Rodger, *Oligopolistic Market Failure: Collective Dominance Versus Complex Monopoly*, E.C.L.R., 1995, 16(1), 21-29, p. 26 and T. Vecchi, *Unilateral Conduct In An Oligopoly According To The Discussion Paper On Article 82: Conscious Parallelism Or Abuse Of Collective Dominance?*, *World Competition*, 2008, 31(3), 385-400, p. 387.

its rivals in order to determine its own best policy and in such circumstances each undertaking may legitimately adapt its strategy to that of the other market participants³⁸.

Mere parallel behaviour concerns the situation of intelligent adaptation by competitors to the market conduct of their rivals, which is considered as legitimate behaviour and does not violate the provisions of the Merger Regulation, since it is attributed to the interdependence inherent in oligopolies and accordingly it results from the normal operation of such markets³⁹. The underlying rationale for the legality of the competitors' intelligent alignment to the conduct of their rivals is centred on the fact that it would be illogical to prohibit the firms to behave rationally in oligopolistic markets. Consequently, it is considered as acceptable behaviour for the oligopolists to be aware of their interdependence and take it into account thereof in their market decisions, as long as they take all their decisions unilaterally, without tacitly coordinating⁴⁰.

The focus of EU Merger Control is not on mere parallel behaviour, but on the influence of the concentration under investigation on the likelihood of anticompetitive parallel conduct in the form of tacit collusion between the oligopolists post-merger⁴¹. The

³⁸ M. Schodermeier, *Collective Dominance Revisited: An Analysis Of The EC Commission's New Concepts Of Oligopoly Control*, E.C.L.R., 1990, 11(1), 28-34, p. 33, B. Rodger, *The Oligopoly Problem And The Concept Of Collective Dominance: EC Developments In The Light Of U.S. Trends In Antitrust Law And Policy*, C.J.E.L., 1995/1996, 2, 25-47, p. 26 and A. Onuma, *To What Extent Is The Concept Of Collective Dominance Applicable Under The ECMR?*, 2005, available at http://www.dundee.ac.uk/cepmlp/car/html/car8_article10.pdf, 1-25, p. 15.

³⁹ J. Lang, above note 6, pp. 275 and 304 and G. Stirati, above note 3, p. 258.

⁴⁰ J. Langer, above note 1, p. 107.

⁴¹ G. Aigner et al., above note 16, pp. 313-314.

main difference between these two theories is that even though tacit collusion entails a high degree of interdependence and the recognition of such interdependence by the oligopolists is a prerequisite for coordination, as it leads to the adoption of an implicit common policy, interdependence by itself is insufficient for the collective exercise of market power, since the common policy also needs to be sustainable towards both the internal and external destabilizing forces⁴². Thus, for the establishment of collective dominance, tacit collusion must be demonstrated and such market behaviour takes place when, in a market with the appropriate characteristics, the players recognise their interdependence, but in addition they act upon such interdependence by aligning their conduct, ceasing to compete effectively with each other and collectively exercise sustainable market power⁴³.

(D) THE *AIRTOURS* FACTORS FOR COORDINATION AND BEYOND

(1) Introduction

In collective dominance cases the Commission must initially assess whether the merger would result in a market structure which would make it possible and would create an incentive for the remaining rivals to adopt a tacit common understanding of coordination so

⁴² G. Niels, above note 25, p. 170 and S. Stroux, Case Comment – Collective Dominance Under The Merger Regulation: A Serious Evidentiary Reprimand For The Commission, *E.L.Rev.*, 2002, 27(6), 736-746, p. 737.

⁴³ *Gencor* para. 276, *Airtours* para. 60 and *Sony* para. 121. See also, V. Rabassa and P. Christensen, above note 26, pp. 228-229, F. Bektashi, above note 20, p. 41, P. Mertens, How Consistently Has The Issue Of Collective Dominance Been Developed Under Article 82 And The EC Merger Regulation Respectively?, 2001, available at <http://www.grin.com/en/e-book/104011/how-consistently-has-the-issue-of-collective-dominance-been-developed-under>, 1-15, p. 2, D. Ridyard, above note 7, p. 164, A. Winckler and M. Hansen, above note 1, p. 789 and B. Etter, above note 2, p. 103.

as to avoid or reduce active competition between them⁴⁴. Nonetheless, the positive conclusion on such an assessment is insufficient in itself to establish collective dominance, since it also needs to be shown that the common understanding would be sustainable⁴⁵. Sustainability constitutes the backbone of tacit coordination and refers to the fact that the common coordinated understanding must be stable over time, i.e. the concentration must produce a lasting adverse impact on competition as opposed to a quick erosion of such an anticompetitive conduct.

The GC in *Airtours* clarified the conditions which are necessary to be fulfilled in order to demonstrate the adoption of a common coordinated understanding between the oligopolists as well as the sustainability of such an understanding post-merger and establish collective dominance in horizontal concentrations⁴⁶. These conditions, i.e. the ‘*Airtours* factors’, refer to the criteria of a common policy, transparency, retaliation mechanisms and absence of external countervailing power⁴⁷. On the one hand, the condition of common policy and the criterion of transparency, as an element which facilitates the formation of such a policy, relate to the analysis of the adoption of a common consensus on a tacit understanding of coordination. On the other hand, the conditions of transparency, as an element which facilitates the monitoring of deviations, retaliation mechanisms and the absence of external

⁴⁴ *Airtours* paras 59 and 61, *Impala* paras 245-246, *Sony* paras 120, 122 and 123 and Horizontal Merger Guidelines paras 39, 41 and 42.

⁴⁵ *Airtours* para. 62, *Impala* para. 247, *Sony* para. 123 and Horizontal Merger Guidelines paras 39, 41 and 42. See also, S. Stroux, above note 42, pp. 740 and 744, J. Briones and A. Padilla, above note 26, p. 312, F. Bektashi, above note 20, pp. 30-31, H. Haupt, above note 20, p. 442 and S. Stroux, above note 23, p. 220.

⁴⁶ J. Langer, above note 1, p. 110 and R. O’Donoghue and C. Feddersen, *Airtours Plc. v. Commission*, C.M.L.R., 2002, 39, 1171-1185, p. 1176.

⁴⁷ *Airtours* paras 61-62, *Impala* paras 246-247, *Sony* paras 122-123 and *ABF/GBI* para. 143.

countervailing power aim to legally establish the sustainability of the coordinated understanding. These are cumulative criteria in so far as insufficient evidence in support of one of these conditions will exclude a collective dominance finding. Conversely, the cumulative establishment of these conditions is sufficient to demonstrate the absence of effective internal or external competition in relation to the collusive group and results in a collective dominance outcome. In particular, the fulfilment of the conditions of a common policy, transparency and retaliation mechanisms establishes the absence of internal competition between the members of the collusive group, while the fulfilment of the condition relating to the lack of outsiders' countervailing power demonstrates the absence of external competition.

(2) Common Policy

The analysis of the common policy condition focuses on the ability and the incentive of the oligopolists to adopt a tacit common consensus on a coordinated understanding by recognising the interaction between themselves and their competitors in order to align their market conduct and cease to compete effectively⁴⁸. Specifically, the establishment of coordination necessitates the adoption of a tacit common understanding between the market participants on the parameters that will form the focal point of the proposed coordination, such as the type of coordination, how coordination should work and the implicit rules that should govern such an understanding⁴⁹. Nevertheless, the implicit formation of a common policy may be problematic in practice owing to the fact that there

⁴⁸ *Airtours* paras 59 and 61, *Impala* paras 245-246, *Sony* paras 120, 122 and 123 and Horizontal Merger Guidelines paras 39, 41 and 42. See also, A. Nikpay and F. Houwen, above note 13, pp. 197-198, B. Etter, above note 2, p. 124 and P. Mertens, above note 43, p. 2.

⁴⁹ *Sony* para. 123. See also, S. Albaek et al., above note 28, p. 2 and O. Black, above note 30, p. 408.

may be a considerable gap between the oligopolists' desire to engage in a coordinated interaction and the ability to do so successfully, as for example each supplier may have different preferences on the collusive price which should be adopted according to its costs conditions and market shares⁵⁰.

In order to establish that the oligopolists would have the ability and the incentive to adopt a common policy of coordination post-merger, the structural characteristics of the relevant market must be favourable towards such an outcome⁵¹. For example, a factor facilitating the formation of a common collusive understanding is the presence of links, since two or more undertakings due to 'factors giving rise to a connection between them' will be able to adopt a common policy on the market⁵². Specifically, some form of a connecting factor is needed in order to show collective behaviour and in that regard the relationship of mutual interdependence is sufficient, of itself, to satisfy the requirement of a link between the oligopolists⁵³.

⁵⁰ J. Briones, above note 2, p. 119.

⁵¹ *Airtours* para. 61, *Impala* para. 246, *Sony* para. 122 and Horizontal Merger Guidelines paras 39, 41, 42 and 44-48. Note also the discussion on the market characteristics that facilitate the adoption of a common policy at Ch. 3. See also, S. Stroux, above note 23, p. 238 and R. O'Donoghue and C. Feddersen, above note 46, p. 1173.

⁵² *France v. Commission* para. 221, *Gencor* para. 163, *Airtours* para. 59, *Impala* para. 245 and *Sony* para. 120. See also, M. Jephcott and C. Withers, Where To Go Now For E.C. Oligopoly Control?, E.C.L.R., 2001, 22(8), 295-303, p. 297 and J. Lang, above note 6, p. 269.

⁵³ *Gencor* para. 276, *Airtours* para. 60 and *Sony* para. 121. Note also the discussion on links at Ch. 3 and the policy developments in relation to that factor at Ch. 4. See also, S. Stroux, above note 23, p. 220, I. Kokkoris, above note 5, p. 425, C. Gordon and R. Richardson, Collective Dominance: The Third Way?, E.C.L.R., 2001, 22(10), 416-423, pp. 419-420, J. Briones and A. Padilla, above note 26, p. 316, J. Venit, Two Steps Forward And No Steps Back: Economic Analysis And Oligopolistic Dominance After *Kali and Salz*, C.M.L.R., 1998, 35, 1101-1134, p. 1133, A. Nikpay and F. Houwen, above note 13, pp. 197-198, O. Odudu, above note 30, pp.

Lastly, it should be noted that, even though the adoption of a common coordinated policy must result in a significant restriction of effective competition between the members of the collusive group, the total elimination of competition among the colluding firms is not necessary and accordingly it is sufficient if the oligopolists would adopt a common understanding on some instances of competition, for example prices, but not in relation to others⁵⁴. Nonetheless, it is difficult for the Commission to prove the formation of a common coordinated understanding if the market would be characterised by intense competition between the oligopolists⁵⁵.

(3) Transparency/Monitoring

Transparency is a necessary condition for coordination and it relates to the ability of each oligopolist to monitor the market variables and the reactions of its competitors⁵⁶. Transparency plays a crucial twofold role, since it contributes towards both the identification of a common understanding of coordination as well as to its sustainability⁵⁷. On the one hand, high market transparency facilitates the adoption of a common coordinated policy, as it

44-45, M. Motta, above note 24, p. 199, V. Korah, *Gencor v. Commission: Collective Dominance*, E.C.L.R., 1999, 20(6), 337-341, p. 337, G. Elliott, above note 4, pp. 644-645, E. Kloosterhuis, above note 20, p. 79, S. Stroux, above note 42, p. 738 and S. Stroux, above note 26, p. 42.

⁵⁴ *Impala* para. 110. See also, H. Haupt, above note 20, p. 440, A. Hinds, above note 4, p. 1707, J. Lang, above note 6, pp. 317-318 and V. Rabassa and P. Christensen, above note 26, p. 234.

⁵⁵ S. Baxter and F. Dethmers, above note 21, p. 158.

⁵⁶ *Airtours* para. 62, *Impala* para. 247, *Sony* para. 123 and Horizontal Merger Guidelines para. 41. See also, K. Kuhn, *Collusion Theory In Search Of Robust Themes: A Comment On Switgard Feuerstein's Survey*, J.I.C.T., 2005, 5(3), 207-215, p. 211.

⁵⁷ *Airtours* paras 62 and 159 and *Sony* para. 126. See also, S. Stroux, above note 42, p. 740, O. Odudu, above note 30, p. 45 and S. Albaek et al., above note 28, pp. 2-3.

eliminates strategic uncertainty between the oligopolists, it assists each competitor to independently assess whether the implementation of tacit collusive conduct would be rational and it assists the identification of focal points for coordination thereby making it possible to establish the implicit terms of the collusive understanding⁵⁸. On the other hand, for the common coordinated policy to be sustainable, market transparency must be high enough in order to enable each member of the collusive group to monitor how the market conduct of the other coordinating firms is evolving and check whether they are complying with the common collusive understanding or whether they are deviating from it, to distinguish cheating from mere adjustments deriving from a volatility of demand as well as to discourage cheating by ensuring that any deviation from the common collusive understanding can be detected and effectively punished⁵⁹. Lastly, it should be highlighted that the degree of transparency depends on the characteristics of the relevant market under investigation⁶⁰.

(4) Retaliation Mechanisms

Retaliation refers to the colluding firms' reaction against a deviation by a member of the collusive group which attempts to skim additional profits in the short term. In

⁵⁸ *Airtours* para. 62, *Impala* para. 440 and *Sony* para. 126. See also, S. Albaek et al., above note 28, p. 2 and A. Scott, 'An Immovable Feast?': Tacit Collusion And Collective Dominance In Merger Control After *Airtours*, CCR Working Paper CCR 02-6, 2006, available at http://www.uea.ac.uk/polopoly_fs/1.104458!ccr02-6.pdf, 1-21, p. 17.

⁵⁹ *Gencor* para. 227, *Airtours* para. 62, *Impala* paras 247 and 440, *Sony* paras 123 and 126 and Horizontal Merger Guidelines para. 49. See also, S. Stroux, above note 42, p. 740, J. Briones, Oligopolistic Dominance: Is There A Common Approach In Different Jurisdictions? A Review Of Decisions Adopted By The Commission Under The Merger Regulation, E.C.L.R., 1995, 16(6), 334-347, p. 342, G. Niels, above note 25, pp. 171-172, S. Stroux, above note 26, p. 10 and B. Etter, above note 2, p. 124.

⁶⁰ Horizontal Merger Guidelines para. 50. Note also the discussion on the structural characteristics which facilitate monitoring at Ch. 3.

particular, the colluding firms typically find it difficult to stabilise a tacit coordinated policy over time, because there is a tension between the undertakings' incentive to maintain the common collusive understanding in order to collectively profit from the imposition of supra-competitive prices and the individual incentive of each member of the coordinated group to deviate from the common collusive policy by undercutting the fixed price in order to benefit from higher sales volumes⁶¹. In those circumstances, the presence of an adequate deterrent mechanism functions as a means to punish deviations and it is a necessary condition for the sustainability of tacit coordination, since it constitutes a discipline measure towards the members of the coordinated group that persuades them to comply with certain collusive market behaviour and it ensures that there is a long term incentive among the coordinating firms not to depart from the common policy⁶². Accordingly, the colluding firms will individually consider it rational to abstain from independent competitive action only if they anticipate that an adequate punishment awaits them if they deviate from the common policy and this in turn

⁶¹ G. Aigner et al., above note 16, p. 313, S. Bishop, Case Comment - Power And Responsibility: The ECJ's *Kali-Salz* Judgment, E.C.L.R., 1999, 20(1), 37-39, p. 38, H. Niemeyer et al., above note 5, p. 377, A. Amelio et al., above note 9, p. 91, Ş. Ardiyok, above note 25, p. 6 and S. Albaek et al., above note 28, p. 2.

⁶² *Gencor* para. 276, *Airtours* para. 62, *Impala* paras 247 and 465, *Sony* para. 123 and Horizontal Merger Guidelines paras 41 and 52. See also, S. Stroux, above note 42, pp. 737 and 740, I. Kokkoris, above note 20, p. 39, A. Scott, above note 58, pp. 11 and 18, Europe Economics, Study On Assessment Criteria For Distinguishing Between Competitive And Dominant Oligopolies In Merger Control, Final Report For The European Commission Enterprise Directorate General, 2001, available at <http://www.cea.fi/course/material/EuropeEconomics.pdf>, 1-135, p. 25, L. Cabral, Collusion Theory: Where To Go Next?, J.I.C.T., 2005, 5:3/4, 199-206, p. 201, J. Langer, above note 1, p. 114, C. Engel, Competition As A Socially Desirable Dilemma – Theory v. Experimental Evidence, Preprints Of The Max Planck Institute For Research On Collective Goods, 2009, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1444270, 1-24, p. 9, C. Caffarra and J. Ysewyn, above note 7, pp. 469-470, and O. Odudu, above note 30, pp. 45-46.

stabilises the collusive understanding by minimizing the incentive to cheat⁶³. Conversely, the inability to punish cheating will result in a very unstable parallel behaviour and in such circumstances a finding of collective dominance will be impossible. The analysis of retaliation focuses on the relevant market characteristics which influence the ability and the incentive of the collusive group to punish deviations⁶⁴.

The sustainability of collusion is measured by the critical discount factor which compares the profit trade-off between the individual short-term income that any firm could gain by deviating from the common coordinated policy and the loss that it would suffer in later periods by the retaliatory reaction of the collusive group to such cheating, as opposed to the long-term profits of adhering to the coordinated consensus⁶⁵. Collusion is sustainable only if the firms attach considerable weight to future profits and in particular if the income expected to be gained in the long run by colluding is greater than the income anticipated to be gained through the maximization of short-run own profits by undercutting the collusive price

⁶³ G. Werden, *Economic Evidence On The Existence Of Collusion: Reconciling Antitrust Law With Oligopoly Theory*, *Antitrust L.J.*, 2003-2004, 71, 719-800, p. 730, R. O'Donoghue and C. Feddersen, above note 46, pp. 1176-1177, J. Langer, above note 1, p. 106 and S. Feuersten, *Collusion In Industrial Economics - A Survey*, *J.I.C.T.*, 2005, 5:3/4, 163-198, p. 166.

⁶⁴ Note also the discussion on the market characteristics which facilitate retaliation at Ch. 3. See also, S. Stroux, above note 42, p. 737 and C. Caffarra and J. Ysewyn, above note 7, p. 470.

⁶⁵ A. Lofaro, *When Imperfect Collusion Is Profitable*, *Journal Of Economics*, 1999, 70(3), 235-259, p. 236, G. Werden, above note 63, p. 730, J. Motis, *Mergers And Acquisition Motives*, 2007, available at <http://economics.soc.uoc.gr/wpa/docs/paper2mottis.pdf>, 1-30, pp. 6-7, F. Jenny, above note 5, p. 363, F. Mezzanotte, above note 21, p. 17, S. Suetens and J. Potters, *Bertrand Colludes More Than Cournot*, *Experimental Economics*, 2007, 10, 71-77, p. 73, C. Engel, above note 62, p. 6 and M. Stenborg, *Forest For The Trees: Economics Of Joint Dominance*, *E.J.L.E.*, 2004, 18, 365-385, p. 369.

and the loss resulting from the retaliatory response of the rivals⁶⁶. In circumstances where deviations can be detected and effectively punished by the collusive group, the discount factor will be sufficiently large and the benefits of cheating will be minimal⁶⁷.

Moreover, for an adequate retaliation mechanism to be established the punishment must be timely, credible and effective⁶⁸. Timely punishment refers to the fact that the collusive group must be able to detect quickly if a firm deviates from the common coordinated policy and respond by an equally quick retaliatory measure, because the longer the detection and any subsequent reaction lags the more heavily future profits are discounted in which case cheating becomes more likely⁶⁹. The credibility of punishment revolves around the fact that where deviation by a firm is detected, there must be sufficient certainty that some

⁶⁶ K. Kuhn, above note 56, p. 211, A. Gallice, *The Neglected Effects Of Demand Characteristics On The Sustainability Of Collusion*, International Centre For Economics Research Working Paper Series, 2008, available at <http://econpapers.repec.org/paper/cprceprdp/6975.htm>, 1-15, p. 2, F. Mezzanotte, above note 14, p. 529, S. Feuersten, above note 63, pp. 163 and 166, R. Porter, *Detecting Collusion*, Review Of Industrial Organization, 2005, 26, 147-167, p. 163, U. Schwalbe and D. Zimmer, *Law And Economics In European Merger Control*, Oxford, First Edition, 2009, p. 230, K. Abbink and J. Brandts, *Collusion In Growing And Shrinking Markets: Empirical Evidence From Experimental Duopolies*, 2005, available at <http://www.nottingham.ac.uk/cedex/documents/papers/2005-03.pdf>, 1-20, p. 5 and R. Porter, *Collusion In Industrial Economics: A Comment*, J.I.C.T., 2005, 5:3/4, 231-234, p. 231.

⁶⁷ P. Denis, *Market Power In Antitrust Merger Analysis: Refining The Collusion Hypothesis*, Antitrust L.J., 1991-1992, 80, 829-838, pp. 832-833 and H. Friederiszick and F. Maier-Rigaud, *Triggering Inspections Ex Officio: Moving Beyond A Passive EU Cartel Policy*, J.C.L.&E., 2008, 4(1), 89-113, pp. 91-92.

⁶⁸ Horizontal Merger Guidelines para. 49. See also, F. Jenny, above note 5, p. 363, V. Rabassa and P. Christensen, above note 26, p. 229 and G. Stirati, above note 3, p. 258.

⁶⁹ Horizontal Merger Guidelines para. 53. See also, G. Niels, above note 25, p. 171, S. Albaek et al., above note 28, p. 2 and V. Rabassa and P. Christensen, above note 26, p. 229.

retaliatory mechanism will be activated⁷⁰. Accordingly, for the retaliation to be credible the collusive group must have the means as well as the willingness to punish cheating, while the deterrents may not be credible due to the high costs they entail for the firms implementing the punishment⁷¹. The effectiveness of punishment depends on the degree of severity of retaliation and in order to convince the coordinating firms to stick to the common collusive policy the punishment must imply a significant loss of profits for the deviating firm as compared to the profits that such a firm would have obtained by maintaining the collusive understanding⁷².

Lastly, a retaliation mechanism usually takes the form of trigger strategies implemented by the colluding firms, which react to a deviation by reverting to the competitive level of prices in the subsequent period⁷³. Also, punishments are typically symmetric and entail collective sacrifice⁷⁴. However, if the colluding firms can single out the deviator, they may deploy punishments that are specifically targeted at reducing the profits of that particular undertaking, such as the threat of a price war in the defector's territories⁷⁵.

⁷⁰ Horizontal Merger Guidelines para. 52.

⁷¹ Horizontal Merger Guidelines para. 54. See also, B. Etter, above note 2, p. 119, I. Kokkoris, above note 5, p. 437 and F. Mezzanotte, above note 21, p. 24.

⁷² Horizontal Merger Guidelines para. 52. See also, G. Stirati, above note 3, p. 258, G. Niels, above note 25, p. 171 and S. Ardiyok, above note 25, p. 7.

⁷³ B. Etter, above note 2, pp. 120-121, G. Werden, above note 63, pp. 730 and 733, Europe Economics, above note 62, pp. 15-16, U. Schwalbe and D. Zimmer, above note 66, p. 225, D. Yao and S. DeSanti, Game Theory And The Legal Analysis Of Tacit Collusion, The Antitrust Bulletin, 1993, Spring, 113-141, p. 131 and A. Lofaro, above note 65, p. 236.

⁷⁴ R. Porter, above note 66, p. 231.

⁷⁵ J. Harrington and A. Skrzypacz, Collusion Under Monitoring Of Sales, Rand Journal Of Economics, 2007, 38(2), 314-331, p. 329.

(5) Countervailing Power Of Competitors, Customers And Consumers

In order to establish the sustainability of coordination it is also necessary to prove that the foreseeable countervailing reaction of current and future competitors, customers and consumers would not undermine the results expected from the common collusive policy, i.e. such external competitive forces should not be able to react in a manner that would make the common policy unprofitable⁷⁶. There are three elements of external competitive constraints that must be analysed under this condition, namely competitors already present in the market, potential competitors and buyer power. The analysis of current competitors focuses on fringe firms incumbent in an oligopolistic market, in which case the Commission assesses whether the competitive fringe as a whole can lower its prices in response to price increases imposed by the coordinating group, so that the gains of the colluding firms would be reduced and the common collusive policy would be destabilised⁷⁷. It also focuses on maverick firms, in which case the Commission assesses whether such firms are present in the oligopoly and whether they would be capable to constrain the exercise of market power by the colluding firms⁷⁸. In the appraisal of potential competition the issue which must be examined is whether future entry is feasible to occur in the relevant market and in that context the assessment of barriers to entry is an important consideration⁷⁹. In the analysis of the buyer side the emphasis is on whether the customers or the consumers possess strong countervailing buyer power, which may mitigate the bargaining strength of the colluding suppliers and may

⁷⁶ *Airtours* para. 62, *Impala* para. 247, *Sony* para. 123 and Horizontal Merger Guidelines para. 41. See also, G. Stirati, above note 3, p. 261, J. Langer, above note 1, p. 114 and O. Odudu, above note 30, p. 46.

⁷⁷ Note also the discussion on fringe firms at Ch. 3. See also, S. Stroux, above note 26, p. 10 and S. Baxter and F. Dethmers, above note 21, pp. 152-153.

⁷⁸ Note also the discussion on maverick firms at Ch. 3.

⁷⁹ Note also the discussion on potential competition at Ch. 3. See also, J. Briones, above note 59, p. 346.

respond to an anticompetitive price increase imposed by the coordinating firms in a way that would make such a price strategy unprofitable⁸⁰.

(6) The *Impala* Indirect Test

(I) Introduction

Despite the significance of the *Airtours* test that is related to its solid reliance on economic theory and the clarity that it affords on the elements relevant in the establishment of collective dominance, it is problematic due to its strictness. Such strictness refers to the demanding evidentiary threshold that derives from the requirement to establish directly the cumulative presence of the *Airtours* criteria, whilst the inability to prove one limb of the test would undermine the Commission's entire case. In addition, such conditions are 'internally' cumulative, since they require the totality of the structural characteristics which are relevant in the determination of each one of those factors to be favourable towards coordination. In *Sony/BMG* the Commission employed an exact application of the *Airtours* test and the decision clearly demonstrates that the inability to fully establish by direct evidence one limb of the *Airtours* test, i.e. transparency, leads to the exclusion of collective dominance⁸¹. In *Impala* the GC reacted to the strict formulation of the *Airtours* test by introducing a more flexible test to be met in the assessment of the strengthening of pre-existing collective dominance in order to avoid the delimitation in the applicability of such a concept.

⁸⁰ Note also the discussion on countervailing buyer power at Ch. 3. See also, I. Kokkoris, Buyer Power Assessment In Competition Law: A Boon Or A Menace?, *World Competition*, 2006, 29(1), 139-164, pp. 141 and 159.

⁸¹ *Sony/BMG* (Case COMP/M.3333 [2004]). See also, S. Baxter and F. Dethmers, above note 21, pp. 149-150 and F. Mezzanotte, above note 14, p. 539

In *Impala* the GC principally focused on the analysis of the strengthening of a pre-existing collective dominant position. Such an analysis involves a two-step assessment whereby in the first step the existence of coordination between the oligopolists in the pre-merger market must be examined, i.e. whether there is a ‘pre-existing collective dominant position’, whilst in the second step the emphasis of the appraisal is on whether the concentration under investigation would make coordination ‘easier, more stable or more effective’ post-merger, i.e. whether the concentration would ‘strengthen’ such a position⁸². The significance of the *Impala* judgment lies in that the GC introduced the indirect test which created an alternative avenue to prove pre-existing collective dominance, i.e. the first step of the assessment, as in such a context it relaxed the necessity to establish the *Airtours* criteria directly by asserting that under certain circumstances these conditions may also be established indirectly⁸³.

(II) The Rationale And The Conditions Of The Indirect Test

The *Impala* indirect test is comprised by two parts which essentially constitute the rationale of the test and the conditions for its fulfilment. Specifically, the GC set out the rationale of the indirect test by holding that in the assessment of pre-existing collective dominance the *Airtours* criteria may be established indirectly ‘on the basis of a very mixed series of indicia and items of evidence relating to the signs, manifestations and phenomena inherent in the presence of a collective dominant position’⁸⁴. Therefore, the Court stated in essence that the existence of mere indicia and evidence of coordination may establish indirectly the *Airtours* criteria. Also, the GC expressly referred to the conditions that may

⁸² Horizontal Merger Guidelines para. 22.

⁸³ F. Mezzanotte, above note 14, pp. 525 and 535.

⁸⁴ *Impala* para. 251.

fulfil the indirect test as it held that ‘in particular, close alignment of prices over a long period, especially if they are above a competitive level, together with other factors typical of a collective dominant position, might, in the absence of an alternative reasonable explanation, suffice to demonstrate the existence of a collective dominant position, even where there is no firm direct evidence of strong market transparency, as such transparency may be presumed in such circumstances’⁸⁵. Thus, the GC seemingly asserted that proof of the firms’ parallel market conduct along with other factors and the absence of a competitive explanation may be sufficient to demonstrate pre-existing collective dominance and presume the presence (each one or all) of the *Airtours* criteria⁸⁶.

The *Impala* test sets out three cumulative conditions which may suffice to demonstrate a pre-existing collective dominant position and presume the indirect establishment of the *Airtours* criteria. Firstly, it must be illustrated that there is close alignment of prices over time and at an above the competitive level. Therefore, price parallelism may constitute evidence of coordination⁸⁷. Nevertheless, proof of parallel prices in themselves, even if they are sustained over time, does not suffice to prove coordination, because such pricing conduct may not be inconsistent with intense competition or it may be attributed to pure oligopolistic interdependence and consequently it must be established that the prices prevailing in the relevant market are higher than the competitive level, but also that

⁸⁵ *Impala* para. 252.

⁸⁶ F. Mezzanotte, above note 14, pp. 525 and 540.

⁸⁷ S. Stephanou, Collective Dominance Through Tacit Coordination: The Case For Non-Coordination Between Article 82 And Merger Control ‘Collective Dominance’ Concepts, G.C.P., 2009, October, 1-8, p. 7.

the other conditions of the indirect test are satisfied⁸⁸. Secondly, it must be examined whether there are other factors typical of a collective dominant position and in that context the GC sets out a few such factors as an example, i.e. the ‘power of undertakings in an oligopoly situation’ and the ‘stability of market shares’⁸⁹. Accordingly, this stage of the indirect analysis assesses the structural characteristics of the pre-merger market. Nonetheless, these structural characteristics must not be examined in isolation from the overall analytical framework, but on the contrary the focus of the assessment should be on whether such factors are consistent with the firms’ behavioural incentives to adopt a common coordinated policy of parallel prices above the competitive level and to sustain such an understanding over time. Thirdly, it must be established that there is absence of an alternative reasonable explanation than coordination. Thus, this condition revolves around the fact that tacit collusion must form the specific cause for the oligopolists’ parallelism of behaviour, whilst the alternative explanation of intelligent alignment to the competitors’ market conduct must be positively ruled out⁹⁰.

(III) Significance And Problems

The indirect test constitutes an important development which produces extensive implications on the concept of collective dominance under the Merger Regulation for a number of reasons.

⁸⁸ S. Volcker and C. O'Daly, Case Comment - The Court Of First Instance's *Impala* Judgment: A Judicial Counter-Reformation In EU Merger Control?, E.C.L.R., 2006, 27(11), 589-596, p. 593 and F. Mezzanotte, above note 14, p. 536.

⁸⁹ *Impala* para. 253. See also, A. Tajana, Case Comment - EC Merger Control: Music Publishing, E.C.L.R., 2006, 27(11), N194-195, p. 194.

⁹⁰ F. Mezzanotte, above note 14, p. 537.

Firstly, the *Impala* test is capable to establish each one or all of the *Airtours* criteria and accordingly it introduces a wide framework for their indirect fulfilment⁹¹. On the one hand, even though the GC focused on the applicability of the indirect test to the factor of market transparency, it seems that this limitation was merely confined to the circumstances of the case, since the general nature of the indirect conditions implies that such a test is equally capable to indirectly establish each one of the other *Airtours* criteria⁹². Specifically, the existence of high parallel prices over time in conjunction with the presence of structural characteristics that facilitate coordination and the absence of an alternative explanation than tacit collusion may also presume the adoption of a common collusive policy of price alignment above the competitive level or the presence of an adequate retaliation mechanism that effectively eliminates the individual incentives of the colluding firms to deviate or the inability of outsiders to counteract the oligopolists' supra-competitive pricing conduct. On the other hand, since the cumulative fulfilment of the same *Impala* conditions may presume the individual presence of each *Airtours* factor, it follows that the fulfilment of the indirect test may also infer the simultaneous establishment of all the *Airtours* criteria. This is confirmed by the rationale of the indirect test as it implies that the presence of phenomena inextricably linked with a position of collective dominance, such as those prescribed by the conditions of the *Impala* test, may establish indirectly all the *Airtours* factors.

Secondly, the *Impala* test sets out a flexible framework for proving the strengthening of a pre-existing collective dominant position. This is evident by the fact that the indirect test relaxes the stringency attached to the fulfilment of the necessary criteria for coordination in the assessment of pre-existing collective dominance as regards the requirement to establish

⁹¹ F. Mezzanotte, above note 14, p. 525.

⁹² *Impala* paras 252-253.

these conditions directly. Additionally, the *Impala* test sets out different evidentiary requirements applicable in the appraisal of the strengthening as opposed to the creation of a collective dominant position, since it suggests that the *Airtours* criteria could be more easily satisfied in the former situation, where they may be established indirectly, rather than the latter⁹³. In particular, the indirect test is exclusively confined to the analysis of the strengthening of pre-existing collective dominance, because it refers to instances, such as parallel pricing behaviour over time, which require the observation and examination of specific past market conduct pointing towards coordination. Conversely, the indirect test is not suitable to be employed in the examination of the creation of collective dominance, as it cannot be applied solely on the basis of likely future behaviour.

Thirdly, the *Impala* indirect test can facilitate the enforcement of the strengthening of pre-existing collective dominance in ‘grey area’ cases, i.e. close cases which present some difficulties in the establishment of tacit collusion in the pre-merger market through the direct fulfilment of the *Airtours* factors. In particular, the requirement to directly establish the cumulative and necessary *Airtours* conditions leads to an enforcement problem as a merger would be declared incompatible with the Common Market only in ‘clear-cut’ cases, i.e. where direct evidence would demonstrate the cumulative presence of those conditions which in turn means that evidence on all relevant market characteristics would be favourable towards pre-existing coordination and provided that the concentration would make coordination easier, more stable or more effective post-merger. Nevertheless, two types of

⁹³ B. Rompuy and C. Pauwels, The European Commission’s Re-Examination Of The *Sony/BMG* Merger: A Precedent-Setting Attempt To Jump The Fence, G.C.P., 2008, July, 1-31, p. 16, S. Stephanou, above note 87, p. 6 and B. Rompuy, Case Comment - Implications For The Standard Of Proof In EC Merger Proceedings: *Bertelsmann And Sony Corporation Of America v. Impala*, E.C.L.R., 2008, 29(10), 608-612, p. 611.

grey area cases may be identified where the *Impala* test would facilitate the demonstration of collective dominance and concern situations where either the Commission would have difficulties to positively establish pre-existing collective dominance due to the lack of some direct evidence in favour of collusion or complexities would arise due to the presence of some direct evidence pointing against coordination. In the first type of ‘grey area’ cases, i.e. ‘lack of some direct evidence’, the *Impala* test relaxes the stringency attached to the *Airtours* criteria, since it opens the way for their indirect establishment in such circumstances, and its applicability in these cases is straightforward as evident by the statement of the GC which expressly refers to the establishment of pre-existing collective dominance even where there is ‘no firm direct evidence of market transparency’. In the second type of grey area cases, i.e. ‘presence of some adverse direct evidence’, most evidence would be in favour of coordination, but the presence of adverse direct evidence flowing from even one structural factor pointing against collusion would render the direct establishment of the *Airtours* conditions impossible. Nonetheless, an expansive interpretation and application of the *Impala* test may bypass this problem, as it may facilitate the indirect establishment of the *Airtours* factors even in the presence of some - but not many - contradictory evidence, i.e. a distinction needs to be made between ‘some’ and ‘many’ adverse evidence as the former points to a grey area case while the latter would point towards a clear-cut clearance decision. Thus, if the Commission could fulfil the *Impala* conditions, then the *Airtours* factors would be established indirectly even if there were some contradictory evidence as regards the relevant market circumstances. For example, the Commission would be able to establish indirectly the existence of a common collusive policy even in the presence of direct evidence of asymmetries, as the availability of sufficient indirect evidence on coordination could demonstrate that, as a matter of fact, the firms have indeed found a way to bypass this complexity. This may also be illustrated by the second condition of the *Impala* test which

focuses on the structural characteristics of the relevant market by referring to ‘other factors typical in a collective dominant position’ and seems to inquire for other ‘plus factors’ aside price parallelism by implying the absence of a strict necessity that ‘all’ the relevant structural factors should be favourable towards such an outcome. Despite the fact that the *Impala* test makes no express reference to situations where there is some direct evidence pointing against collusion, its validity can be justified by the rationale of the test which does not include any limitation to its application and accordingly it can be employed in such a context. Therefore, the application of the *Impala* test in both types of grey area cases is capable to expand the enforcement boundaries of collective dominance beyond its current strict limits to clear-cut cases.

Fourthly, the indirect test is based on an analysis which focuses on the oligopolists’ pre-merger conduct and such an approach is overlapping to the ex-post assessment applied in Article 102 collective dominance. Therefore, the indirect test may constitute a means to shield the EU competition legal system from undetected or problematic collective dominance cases under Article 102 and this is an important development in view of the absence of effective regulation of tacit collusion under the concept of Article 102 collective dominance⁹⁴. Specifically, even when collective dominance cannot be established directly under an Article 102 analysis, in a merger assessment in the same relevant market the Commission may rely on the *Impala* indirect test in order to detect and remedy a case of past,

⁹⁴ Note also the discussion on the absence of Article 102 collective dominance precedent tackling tacit collusion at Ch. 6.

but still evolving, tacit coordination that would be ‘easier, more stable or more effective’ post-merger⁹⁵.

Despite the fact that the indirect test constitutes an important development on the concept of collective dominance in mergers, it does have certain limitations. Most importantly, the fact that the indirect test exclusively applies to the analysis of the strengthening of a collective dominant position diminishes its effects, as the creation of such a position can only be proved by the direct fulfilment of the *Airtours* criteria. Furthermore, there is a relative vagueness on the rationale of the *Impala* test, because the GC does not expressly clarify the meaning of ‘signs, manifestations and phenomena inherent in the presence of a collective dominant position’ and this ambiguity is also related to the question of whether the cumulative conditions of the indirect test are exhaustive⁹⁶. Specifically, it appears that numerous types of such ‘signs’ or ‘phenomena’ may form part of the indirect conditions, while the wording of the judgment introduces such conditions by the phrase ‘in particular’, which implies that they may only be the primary example of the rationale of the test or that they may be solely confined to the particular circumstances of the case and these considerations may diminish their applicability in prospective collective dominance cases. Moreover, the first condition of the indirect test appears to be problematic in its nature, because it is practically difficult to determine what the competitive level of prices is and how much above such level should they be in order to distinguish competitive from collusive

⁹⁵ Nevertheless, the applicability of the *Impala* indirect test is capable to be extended to Article 102 cases focusing on tacit collusion (Note also the discussion at Ch. 6). Also, in the context of mergers the protection from past and continued coordination is limited to the extent that it concerns only situations where a proposed merger triggers an examination of the relevant market.

⁹⁶ S. Volcker and C. O'Daly, above note 88, p. 593.

pricing⁹⁷. Also, it should be emphasised that the rationale of the indirect test as well as its conditions are obiter dicta and this in turn limits their value as a legal precedent. Lastly, it is notable that the Commission has not applied yet the *Impala* indirect test in practice and this may undermine its significance, but also exposes a gap in the enforcement of the concept of collective dominance under the Merger Regulation.

(7) The Sony Mechanism Of Coordination

In *Sony* the ECJ qualified the *Airtours* criteria, as it asserted that the Commission has to avoid assessing each one of those conditions in an isolated manner, but on the contrary such an appraisal should be carried out by using a hypothetical tacit coordination mechanism as a basis⁹⁸. Also, the ECJ held that the establishment of a coordination mechanism is necessary in the analysis of the *Impala* indirect test⁹⁹. Thus, post-*Sony* the Commission must identify a plausible mechanism of hypothetical tacit coordination and connect the *Airtours* factors or apply the indirect test to such coordination as related to the circumstances of each case. Accordingly, the effect of this requirement was that it codified the structure of the collective dominance analysis by placing a hypothetical coordination mechanism at the centre of the assessment. The necessity of such a mechanism is illustrated by the consideration that separate verification of each one of the *Airtours* criteria and with ignorance of the underlying framework for coordination may provide misleading answers.

(8) The Overall Application In ABF/GBI

⁹⁷ F. Mezzanotte, above note 14, p. 536.

⁹⁸ *Sony* paras 124-126. See also, I. Kokkoris, above note 16, pp. 506-507, T. Kaseberg, above note 23, p. 260 and No Cited Author, *BMG/Sony Merger Reversal Highlights Burden Of Proof*, 2008, available at http://www.lw.com/upload/pubContent/_pdf/pub2266_1.pdf, 1-6, pp. 2 and 5.

⁹⁹ *Sony* para. 129. See also, T. Kaseberg, above note 23, p. 260.

The formulations of the Courts in *Airtours* and *Sony* were implemented in *ABF/GBI* where the Commission sought to understand how coordination would actually work in practice by assessing the dynamics of the relevant industry and it analysed coordinated effects by restructuring the relevant test in three parts¹⁰⁰. In the first part, the structural characteristics of the market were assessed in order to determine whether they were favourable towards the adoption of a common coordinated policy and its sustainability¹⁰¹. In the second part, the Commission set up a hypothetical coordination mechanism related to the circumstances of the case and on that basis it tried to determine the extent to which the market characteristics facilitated the emergence of the *Airtours* conditions¹⁰². In the third part, the Commission assessed the effects of the merger on competition by ascertaining whether the alternation in the relevant market structure would significantly impede effective competition by making coordination easier, more stable or more effective¹⁰³. Nevertheless, even though on the facts of the case the Commission examined whether the concentration would make coordination ‘easier, more stable or more effective’ post-merger, it adhered to an exact application of the *Airtours* test, whilst it did not consider the potential applicability of the *Impala* indirect test in the pre-merger market and this later point illustrates that the concept of collective dominance has not been settled, as it is imperative for the Commission and the Courts to explore this alternative avenue in their future decisions¹⁰⁴.

(E) CONCLUSION

¹⁰⁰ *ABF/GBI* para. 144. See also, A. Amelio et al., above note 9, p. 94.

¹⁰¹ *ABF/GBI* para. 145.

¹⁰² *ABF/GBI* para. 145.

¹⁰³ *ABF/GBI* para. 146.

¹⁰⁴ *ABF/GBI* para. 146.

The concept of collective dominance under the Merger Regulation has been developed in order to control anticompetitive concentrations in oligopolistic markets.

Collective dominance refers to a position where two or more independent undertakings would jointly enjoy significant market power after the completion of the concentration. The Commission assesses the creation or the strengthening of a collective dominant position by employing a prospective analysis, the ‘significant impediment to effective competition’ consists the substantive standard against which it appraises the compatibility of concentrations with the Common Market and its focus is on the structural factors that would affect the firms’ behavioural incentives in the relevant market post-merger.

The concept of collective dominance in mergers is based on the economic theory of tacit collusion and it corresponds to the coordinated effects theory of harm. Tacit differs from explicit collusion in that tacit collusion is formed by an implicit understanding to coordinate without any type of communication between the oligopolists and can only be demonstrated by an economic analysis of the relevant market, while explicit collusion is formed by an express agreement or a concerted practice among the market participants and requires the Commission to bring forward hard evidence. Despite the fact that the relevant precedent illustrates that the concept of collective dominance in mergers focuses on tacit collusion, the *Sony* dictum opened up the theoretical and rather marginal possibility to establish collective dominance on the basis of explicit collusion. Furthermore, tacit collusion constitutes anticompetitive conduct and accordingly it must be distinguished from mere parallel behaviour, which is considered legally acceptable conduct as it is based on oligopolistic interdependence and the intelligent alignment of a competitor to the actions of the other market participants.

In order to establish collective dominance the Commission must demonstrate that the oligopolists would adopt a common coordinated understanding and that such an understanding would be sustainable. The fulfilment of these requirements depends on the establishment of the cumulative and necessary *Airtours* criteria of a common policy, transparency, retaliation mechanisms and absence of external countervailing reactions. The common policy condition refers to the fact that the oligopolists must have the ability and the incentive to adopt a tacit consensus on a collusive understanding. Transparency facilitates the adoption of a common policy and it also contributes to its sustainability by affording the ability to monitor deviations. Retaliation mechanisms stabilize a collusive understanding, since they reduce the individual incentive of the coordinating firms to deviate from the common policy. Lastly, the countervailing reaction of competitors, customers and consumers must not be able to distort the common understanding. Despite its significance, the *Airtours* test is problematic due to its strictness and this led the GC in *Impala* to introduce the more flexible indirect test. The rationale of the indirect test provided that in the assessment of pre-existing collective dominance the presence of mere indicia and evidence of coordination may establish indirectly the *Airtours* criteria, whilst the cumulative conditions of the indirect test focus on the demonstration of parallel pricing above the competitive level over time along with other factors and the absence of an alternative explanation than coordination. The indirect test brings many benefits to the analysis of the strengthening of collective dominance as it is capable to establish indirectly each one or all of the *Airtours* criteria, it sets out a flexible framework for proving such a position, it can facilitate its enforcement in ‘grey area’ cases and it may form a shield from undetected or problematic Article 102 collective dominance cases. In *Sony* the ECJ held that the Commission must firstly set up a hypothetical tacit coordination mechanism and then assess the *Airtours* factors or the *Impala* indirect test

on the basis of such a mechanism. Lastly, in *ABF/GBI* the Commission applied in practice the *Airtours* test in conjunction with the *Sony* mechanism of coordination but it refrained to apply the *Impala* indirect test.

CHAPTER 3

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THE ECONOMICS OF COLLECTIVE DOMINANCE

(A) INTRODUCTION

The formulation of the concept of collective dominance under the Merger Regulation has been highly influenced by economic theory. Specifically, despite the fact that collective dominance is a legal concept that has no direct equivalent or any specific significance in economics, it is approached and assessed with economic principles and in particular the theory of tacit collusion¹.

An oligopoly constitutes a prerequisite for the establishment of tacit collusion and it is defined as a market in which the control over the supply of a product is held by a small number of producers that possess large market shares². From a structural point of view,

¹ B. Etter, The Assessment Of Mergers In The EC Under The Concept Of Collective Dominance – An Analysis Of The Recent Decisions And Judgments By An Economic Approach, *World Competition*, 2000, 23(3), 103-139, p. 110 and E. Kloosterhuis, Joint Dominance And The Interaction Between Firms, *E.C.L.R.*, 2001, 22(3), 79-92, p. 81.

² Europe Economics, Study On Assessment Criteria For Distinguishing Between Competitive And Dominant Oligopolies In Merger Control, Final Report For The European Commission Enterprise Directorate General, 2001, available at <http://www.cea.fi/course/material/EuropeEconomics.pdf>, 1-135, p. 9, S. Stroux, Economics Of Oligopoly: An Introduction For Lawyers, EUI Working Paper Law, No. 2002/6, 2002, available at <http://cadmus.eui.eu/dspace/bitstream/1814/184/1/law02-6.pdf>, 1-45, p. 1 and J. Zellmer, Detecting Collusion In Oligopolistic Industries: A Comparison And Proposal, *Hastings International And Comparative Law Review*, 1982-1983, 829-855, p. 830.

oligopolistic markets fall somewhere in between perfect competition and monopoly, since only a few firms are present as opposed to numerous competitors or a single player respectively, while the functionality spectrum of oligopolies is very wide because they can operate in a near competitive fashion as measured in terms of prices and output or in ways where the prevailing prices and output are close to the monopolistic level³. Moreover, an important difference between these market structures is that in an oligopoly the competitors interact and influence each other's behaviour, since the strategic decisions of one firm affect the other market participants due to their interdependence, whereas in a perfectly competitive market the competitors interact with the market as a whole, i.e. competitors, customers and consumers, while in a monopoly there is no interaction at all since the market is dominated by a single firm⁴.

This Chapter analyses the economics of collective dominance under the Merger Regulation. Section B examines the static and dynamic models of oligopolistic interaction, while it also sets out the characteristics of the game theoretic model of tacit collusion. Section C presents the dictations of economic theory on the necessary conditions for coordination and the market characteristics which must be assessed in order to evaluate whether the

³ F. Mezzanotte, Can The Commission Use Article 82 EC To Combat Tacit Collusion?, CCP Working Paper 09-5, 2009, available at http://www.uea.ac.uk/polopoly_fs/1.111282!ccp09-5.pdf, 1-36, p. 15, S. Stroux, Is EC Oligopoly Control Outgrowing Its Infancy?, *World Competition*, 2000, 23(1), 3-50, pp. 5-6, J. Briones, Economic Assessment Of Oligopolies Under The Community Merger Control Regulation, *E.C.L.R.*, 1993, 14(3), 118-122, pp. 118-119, V. Rabassa and P. Christensen, The *Airtours* Decision: Is There A New Commission Approach To Collective Dominance?, *E.C.L.R.*, 2001, 22(6), 227-237, p. 227 and S. Martin, *Industrial Organization*, Oxford, First Edition, 2001, p. 57.

⁴ U. Schwalbe and D. Zimmer, *Law And Economics In European Merger Control*, Oxford, First Edition, 2009, p. 26 and S. Stroux, above note 2, p. 5.

oligopolists would have the ability as well as the incentive to adopt and sustain a common collusive understanding post-merger. Section D sets out some critical insights on the results and assumptions of game theoretic models. Section E concludes by outlining the status of economic theory that underlines collective dominance.

(B) OLIGOPOLISTIC MODELS

(1) Static Games

(I) Introduction

The traditional oligopoly theories as represented by the Cournot, Stackelberg and Bertrand models are static, single period and non-cooperative games⁵.

In static games each firm makes its strategic decisions in anticipation of what its competitors will do and on the basis of these expectations the market participants unilaterally select an action that maximises their own profits through independent rational evaluation of the situation⁶. The market price is subsequently determined by the interaction of these decisions and the demand function. Each player does not have any knowledge of the move of the other players, since the firms make their decisions simultaneously, with the exception of the Stackelberg model, and the competitors do not consider the effects of future responses or past outcomes, i.e. only profits in the current period influence each firm's incentives⁷.

⁵ S. Martin, above note 3, p. 49.

⁶ Europe Economics, above note 2, p. 12.

⁷ R. Rees, Tacit Collusion, Oxford Review Of Economic Policy, 1993, 9(2), 27-40, p. 29, S. Stroux, above note 2, p. 11, D. Yao and S. DeSanti, Game Theory And The Legal Analysis Of Tacit Collusion, The Antitrust Bulletin, 1993, Spring, 113-141, p. 134 and M. Stenborg, Forest For The Trees: Economics Of Joint Dominance, E.J.L.E., 2004, 18, 365-385, p. 371.

In single period games the competitors only meet once and never again⁸. Such games tend to produce competitive outcomes, because the firms which adopt low prices in the current period cannot be punished in the subsequent period and accordingly the incentives to undercut drive prices down to marginal costs⁹. This can be illustrated by the single period prisoner's dilemma which dictates that there are only two possible prices that the firms may charge for a homogeneous product and these are the monopoly price or the competitive price. If both firms charge the monopoly price, they share the monopolistic profit and they are better off than if they charge the competitive price, yet firms fail to reach a collusive equilibrium because they distrust each other¹⁰. The reason for this lies in that, if one firm charges the monopoly price and the other firm charges the competitive price, the high-price competitor suffers losses while the low-price competitor takes the whole market demand¹¹. Therefore, the most rational behaviour and the outcome of this game is that both firms set the competitive price thereby earning lower profits than would have been possible by setting the monopoly price¹².

(II) Bertrand, Stackelberg And Cournot Oligopoly Models

The Cournot model assumes that the oligopolists compete by choosing output for a homogeneous product and they set their quantities only once. Also, each firm chooses

⁸ Europe Economics, above note 2, p. 10.

⁹ M. Stenborg, above note 7, p. 371, J. Kattan and W. Vigdor, Game Theory And The Analysis Of Collusion In Conspiracy And Merger Cases, George Mason Law Review, 1996-1997, 5(3), 441-456, pp. 445-446, H. Friederiszick and F. Maier-Rigaud, Triggering Inspections Ex Officio: Moving Beyond A Passive EU Cartel Policy, J.C.L.&E., 2008, 4(1), 89-113, pp. 90-91 and D. Yao and S. DeSanti, above note 7, p. 134.

¹⁰ F. Mezzanotte, above note 3, p. 16.

¹¹ F. Mezzanotte, above note 3, p. 16.

¹² S. Stroux, above note 2, p. 12 and B. Etter, above note 1, p. 117.

simultaneously with the other firms its individual output level by taking into account the quantities it expects its rivals to produce and the price effects of expanding total output¹³. The result of such a model is that each firm produces a level of output that exceeds the level at which the competitors would agree to collude, because each rival considers only a part of the price effects induced by its decision¹⁴. In such circumstances, the higher the number of market participants, the more the overall output will increase and prices will move towards the perfectly competitive level. However, in this model the prices will always remain above the level which would prevail in a perfectly competitive market, since the price effect of a quantity expansion is at least partly taken into consideration.

The Stackelberg model constitutes a variation of the Cournot quantity model and dictates that the firms do not make their decisions simultaneously, but the player which makes a choice of output first is a leader while the other firms are the followers that form their profit-maximising response by taking the leader's decision as given¹⁵. In those circumstances, the leader has a first-mover strategic advantage in that a quantity expansion on his part will induce the followers to cut the quantities they supply¹⁶. The result of this model is that the leader produces a larger quantity and has a higher market share than in the Cournot model, while the followers produce a smaller quantity and have lower market shares as compared to that model¹⁷.

¹³ S. Martin, above note 3, p. 24 and Europe Economics, above note 2, p. 10.

¹⁴ Europe Economics, above note 2, p. 51.

¹⁵ Europe Economics, above note 2, p. 11.

¹⁶ B. Etter, above note 1, p. 113.

¹⁷ U. Schwalbe and D. Zimmer, above note 4, p. 35.

The Bertrand model assumes that the rivals compete by setting their prices only once, simultaneously and independently, the product is homogeneous, the consumers buy from the firm which sells at the lowest price and the competitors have similar costs. In such a case, if a competitor sets a price above marginal cost, its rivals have an individual incentive to undercut this price in order to capture the whole market demand¹⁸. The limit to such undercutting is reached if one competitor charges a price that equals marginal costs, in which case no firm has an incentive to deviate from this strategy, because if it would charge a lower price it would not be able to cover its production costs while charging a higher price would not be profitable since it would lose sales to its rivals¹⁹. Consequently, the outcome of this model is that the prevailing price in a market with oligopolistic competition is the same as in a market with perfect competition, i.e. prices equal marginal costs²⁰.

All in all, in static oligopolistic games the strategic variable under consideration has an important effect on the market outcome, because the Bertrand price competition model yields the same results as perfectly competitive markets, while in the Cournot model outputs are lower and prices are higher than in perfect competition²¹.

(2) Dynamic Games (Game Theory)

(I) Introduction

¹⁸ S. Martin, above note 3, p. 45.

¹⁹ U. Schwalbe and D. Zimmer, above note 4, p. 30.

²⁰ S. Martin, above note 3, p. 45 and U. Schwalbe and D. Zimmer, above note 4, p. 30.

²¹ C. Holt, Equilibrium Models Of Tacit Collusion In Oligopoly Experiments With Price-Setting Firms, Center For Economic Research - University Of Minnesota, Discussion Paper No. 80, 1980, 1-26, p. 11 and G. Werden, Economic Evidence On The Existence Of Collusion: Reconciling Antitrust Law With Oligopoly Theory, Antitrust L.J., 2003-2004, 71, 719-800, pp. 723-724.

Static single period games are not suitable to analyse collective dominance, because of the lack of repeated interaction and the consequent absence of retaliation²². Instead, dynamic games are more appropriate for such an assessment and in particular the findings of game theory in relation to tacit collusion constitute the basis of the analysis of collective dominance in mergers.

The game theoretic models produce market outcomes based on predictions about how rival firms interact with each other and they revolve around the search for an equilibrium that represents the best strategy for every competitor thereby constituting a Nash equilibrium²³. Specifically, game theory assumes that each firm is a rational market player which independently adopts its best strategy based on the assessment of its competitors' optimal strategies²⁴. Within that context there is dependence of each firm's choice of strategy on how it expects its competitors to react which is attributable to oligopolistic interdependence²⁵.

Game theory purports that market performance is a reflection of numerous variables that collectively influence the market outcome and tries to predict how the players will react

²² C. Engel, *How Much Collusion? A Meta-Analysis Of Oligopoly Experiments*, J.C.L.&E., 2007, 3(4), 491-549, p. 520 and D. Yao and S. DeSanti, above note 7, p. 133.

²³ A set of strategies is a Nash equilibrium if, holding the strategies of all the market participants constant, no firm can obtain a higher pay-off by choosing a different strategy. See also, R. Rees, above note 7, p. 29 and B. Etter, above note 1, p. 111.

²⁴ S. Stroux, above note 2, p. 11.

²⁵ J. Vickers, *Strategic Competition Among The Few – Some Recent Developments In The Economics Of Industry*, *Oxford Review Of Economic Policy*, 1985, 1(3), 39-62, p. 41, R. Blair and J. Herndon, *Inferring Collusion From Economic Evidence*, *Antitrust*, 2001, 15, 17-21, p. 17, D. Yao and S. DeSanti, above note 7, p. 127 and B. Etter, above note 1, p. 112.

under a variety of assumptions²⁶. Accordingly, a game is defined by the set of market players, the strategies available to each competitor, the information rivals have about their environment and about the other firms, the payoffs each player gets given the actions adopted by all the market participants and the equilibrium model that indicates which strategy is best given these payoffs²⁷. Also, each competitor adopts its market strategy by taking into account the history of the game, as the rivals' past responses to a game affect each firm's current feasible strategies²⁸.

(II) Cooperative v. Non-Cooperative Games

Two fields of game theory can be distinguished, namely cooperative and non-cooperative game theory. In cooperative games the competitors make explicit and binding agreements to carry out certain actions that restrict their feasible strategies²⁹. However, in principle the cooperative theory is not used to analyse oligopoly games, because in oligopolies the competitors tend to behave independently on the market and decline to adopt contractual agreements³⁰. In non-cooperative games the firms do not engage in explicit agreements or communications over a proposed course of conduct³¹. Instead, each firm decides independently the choice of strategy which is in its own best interest given the strategies adopted by its competitors³². The result of such games is that each firm's choice of

²⁶ D. Ridyard, *Economic Analysis Of Single Firm And Oligopolistic Dominance Under The European Merger Regulation*, E.C.L.R., 1994, 15(5), 255-262, p. 259.

²⁷ J. Vickers, above note 25, p. 42 and G. Werden, above note 21, p. 721.

²⁸ S. Stroux, above note 2, p. 15.

²⁹ B. Etter, above note 1, p. 116.

³⁰ S. Stroux, above note 2, p. 11 and U. Schwalbe and D. Zimmer, above note 4, p. 27.

³¹ J. Vickers, above note 25, p. 45.

³² B. Etter, above note 1, p. 116 and R. Rees, above note 7, p. 29.

its best strategy will result in equilibria that are non-cooperatively optimal given its competitors' similarly calculated optimal strategies, i.e. the players' strategies are mutually consistent best replies in that no player has any incentive to deviate from its strategy³³. Therefore, an apparently cooperative performance might result from non-cooperative games, since in such circumstances the players act 'as if' they cooperate³⁴.

(III) Repeated Games

In dynamic games the framework for analysing the interaction between competitors is the repeated game theoretic model where precisely the same stage game is repeated and is to be played many, possibly infinite times by the same players³⁵. Repeated interaction explains the adjustment process between competitors and a solution strategy of such a game leads to a tacit collusive outcome³⁶. In particular, repeated interaction facilitates and stabilizes collusion, as stable coordination enforced by the threat of retaliation is most likely when the same game is repeated with minimal variation³⁷.

³³ U. Schwalbe and D. Zimmer, above note 4, p. 28.

³⁴ B. Etter, above note 1, p. 114.

³⁵ S. Stroux, above note 2, p. 13.

³⁶ P. Maille, M. Naldi and B. Tuffin, Understanding And Preventing Tacit Collusion Among Telecommunication Operators, 2009, available at <http://hal.archives-ouvertes.fr/docs/00/44/70/30/PDF/maill2009understanding.pdf>, 249-263, p. 250, U. Schwalbe and D. Zimmer, above note 4, p. 226 and S. Feuersten, Collusion In Industrial Economics - A Survey, J.I.C.T., 2005, 5:3/4, 163-198, p. 164.

³⁷ O. Budzinski, Monoculture Versus Diversity In Competition Economics, Cambridge J.Econ., 2008, 32, 295-324, p. 303.

There are two types of repeated games, i.e. finite and infinite. In a repeated game with a finite horizon the numbers of periods in the game are known, fixed and limited. In finite games there will be no rewards for cooperation nor will there be any punishment in the last period for charging a low price in the preceding period and accordingly each firm will charge the low price irrespective of what its rival does³⁸. Since neither firm has any incentive to cooperate in the last period it will also refrain from cooperating in the previous period and so on until the first period and accordingly this backward induction predicts that each firm chooses the low price strategy in every period³⁹. On the contrary, in infinite games there is no pre-determined last round or competitors have no knowledge of which is the last round and in those circumstances the punishment of deviations is a feasible strategy⁴⁰. These games consist of an infinite repetition of the same stage game and give rise to a plethora of different equilibrium outcomes, such as the monopoly price, the competitive price and prices in between which means that collusive outcomes are possible depending on the particular set of market characteristics⁴¹.

(IV) Tacit Collusion

Tacit collusion forms the underlying economic framework of the legal concept of collective dominance and the Commission and the Courts rely on game theory in order to

³⁸ J. Kattan and W. Vigdor, above note 9, p. 447 and S. Stroux, above note 2, p. 13.

³⁹ G. Niels, Collective Dominance: More Than Just Oligopolistic Interdependence, E.C.L.R., 2001, 22(5), 168-172, p. 171 and J. Kattan and W. Vigdor, above note 9, p. 447.

⁴⁰ U. Schwalbe and D. Zimmer, above note 4, p. 228 and G. Niels, above note 39, p. 171.

⁴¹ H. Friederiszick and F. Maier-Rigaud, above note 9, p. 91, J. Kattan and W. Vigdor, above note 9, p. 447, S. Feuersten, above note 36, p. 164, D. Yao and S. DeSanti, above note 7, p. 133 and M. Coate, Alive And Kicking: Collusion Theories In Merger Analysis At The Federal Trade Commission, C.P.I., 2008, 4(2), 145-174, p. 150.

assess the creation or the strengthening of a collective dominant position post-merger⁴². Tacit collusion concerns market conduct which enables the firms to substitute coordination for competition and thereby obtain prices close to the monopolistic levels and significantly above what unilateral conduct alone would allow in a perfectly competitive market or in a static single-period oligopoly game⁴³.

Game theory dictates that tacit collusion is a dynamic non-cooperative game with infinite repeated interaction. On the one hand, tacit collusion refers to a non-cooperative form of coordination by which the market participants are able to engage in and sustain a common course of conduct by recourse to independent actions⁴⁴. On the other hand, infinitely repeated games present more opportunities for coordination and accordingly they facilitate the adoption of a tacit understanding, whilst the existence of an implicit collusive consensus

⁴² Note also the discussion on tacit collusion and its integration in the legal concept of collective dominance under the Merger Regulation at Ch. 2 and 4. See also, M. Ivaldi, B. Jullien, P. Rey, P. Seabright, J. Tirole, *The Economics Of Tacit Collusion*, Final Report For DG Competition, 2003, available at http://ec.europa.eu/competition/mergers/studies_reports/the_economics_of_tacit_collusion_en.pdf, 1-75, p. 4, K. Kuhn, *The Coordinated Effects Of Mergers*, In: *Handbook Of Antitrust Economics*, Edited by Paolo Buccirossi, MIT Press, First Edition, 2008, 105-144, p. 105 and C. Engel, *Tacit Collusion - The Neglected Experimental Evidence*, 2007, available at http://www.coll.mpg.de/pdf_dat/2007_14online.pdf, 1-15, p. 2.

⁴³ H. Friederiszick and F. Maier-Rigaud, above note 9, p. 90, F. Mezzanotte, above note 3, p. 6 and S. Davies and M. Olczak, *Tacit Versus Overt Collusion Firm Asymmetries And Numbers: What's The Evidence?*, C.P.I., 2008, 4(2), 175-200, p. 178.

⁴⁴ G. Aigner, O. Budzinski and A. Christiansen, *The Analysis Of Coordinated Effects In EU Merger Control: Where Do We Stand After Sony/BMG and Impala?*, E.C.J., 2006, 2(2), 311-336, p. 313, C. Holt, above note 21, p. 3 and F. Mezzanotte, *Direct Versus Indirect Proof Of The Airtours Criterion In Impala*, *World Competition*, 2008, 31(4), 523-540, p. 529.

cannot be inferred from single period games⁴⁵. Also, infinitely repeated interaction is a prerequisite for tacit collusion to be sustained as it enables each firm to react to its competitors' past behaviour, while such an outcome is not possible to materialize in markets where the duration of competition is finite because in such circumstances retaliation cannot take place⁴⁶. Moreover, infinitely repeated games facilitate the players to learn from experience as to how to coordinate their future conduct, because past and present behaviour is taken into account in setting their market strategies⁴⁷.

The theory of oligopolistic interdependence is strongly linked to the attainment of tacit collusion⁴⁸. In particular, tacit collusion is based on the assumption that with repeated interaction the oligopolists recognise their interdependence and even though they act independently, they stick together at a supra-competitive price level and do not compete in an active way⁴⁹.

⁴⁵ R. Cooper and T. Ross, Sustaining Cooperation With Joint Ventures, *Journal Of Law, Economics And Organization*, 2009, 25(1), 31-54, p. 41 and J. Kattan and W. Vigdor, above note 9, p. 449.

⁴⁶ *ABF/GBI* para. 154. See also, G. Niels, above note 39, p. 171 and K. Bagwell and A. Wolinsky, *Game Theory And Industrial Organization*, 2000, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=239431, 1-41, p. 21.

⁴⁷ H. Friederiszick and F. Maier-Rigaud, above note 9, p. 90 and S. Stroux, above note 2, p. 13.

⁴⁸ Note also the discussion on the relationship between oligopolistic interdependence and tacit collusion at Ch. 2.

⁴⁹ M. Coate, above note 41, p. 148, R. Blair and J. Herndon, above note 25, p. 17 and D. Parker, *A Screening Device For Tacit Collusion Concerns*, *E.C.L.R.*, 2006, 27(8), 424-433, p. 424.

Collusion may take various forms such as setting prices above the competitive level or limiting production⁵⁰. However, prices are more flexible in comparison to other competitive variables and accordingly they are the most prominent form of collusion⁵¹. Furthermore, in situations of semi-collusion, i.e. when collusion is successful only in one dimension of competition but not in others, the firms do not replicate a monopolist in all regards, yet they may still have the effect of leading to an analogous anticompetitive outcome as full collusion, even though they may yield lower equilibrium profits than when they collude in all stages⁵².

(C) FACTORS RELEVANT IN THE ASSESSMENT OF COLLECTIVE DOMINANCE

(1) Introduction

When parallel behaviour between competitors appears likely to occur in an oligopolistic market post-merger, the Commission must determine whether such parallelism would be the result of a tacit understanding which leads to anticompetitive outcomes or of mere parallel behaviour which is fully in line with the competition rules⁵³. Economic theory assists the Commission to resolve such a dilemma, as it provides indirect proofs of tacit

⁵⁰ *ABF/GBI* para. 206, *Sony* para. 121 and Horizontal Merger Guidelines para. 40.

⁵¹ M. Stenborg, above note 7, p. 375 and C. Doerr, The Problem Of Collusion: How Best To Resolve It?, Auckland University Law Review, 2000-2003, 9, 104-126, p. 104.

⁵² P. Denis, Market Power In Antitrust Merger Analysis: Refining The Collusion Hypothesis, Antitrust L.J., 1991-1992, 80, 829-838, pp. 832-833, S. Feuersten, above note 36, p. 171 and M. Stenborg, above note 7, p. 375.

⁵³ Note also the discussion on the relationship between tacit collusion and mere parallel behaviour at Ch. 2.

collusion by emphasising those market circumstances that may lead to such behaviour⁵⁴. In particular, game theory purports that the alteration of the market characteristics by a merger affects the firms' strategic behaviour and may facilitate the attainment of a tacit collusive policy and its sustainability, while such indirect proofs of tacit collusion have been directly imported within the legal analysis of collective dominance in mergers⁵⁵.

(2) The *Airtours* Factors In Economic Theory

The dictations of economic theory and in particular the authoritative declarations of Stigler have set out the conditions which must be present in order to establish a collusive outcome in repeated game theoretic models. Specifically, Stigler purports that successful coordinated interaction depends on the fulfilment of three conditions revolving around the establishment of a common collusive policy, the detection of deviations and the punishment of such deviations, while he also focused on peripheral circumstances relating to the absence of destabilising factors such as entry or buyer power⁵⁶. These conditions have been directly integrated into the legal concept of collective dominance under the Merger Regulation and in

⁵⁴ M. Grillo, *Collusion And Facilitating Practices: A New Perspective In Antitrust Analysis*, E.J.L.E., 2002, 14(2), 151-169, pp. 159-160 and D. Yao and S. DeSanti, above note 7, pp. 130 and 140-141.

⁵⁵ *ABF/GBI* paras 140 and 146 and Horizontal Merger Guidelines para. 43. See also, J. Kattan and W. Vigdor, above note 9, p. 451, J. Zellmer, above note 2, p. 835, F. Mezzanotte, above note 3, p. 5, S. Bishop, *Case Comment - Power And Responsibility: The ECJ's Kali-Salz Judgment*, E.C.L.R., 1999, 20(1), 37-39, p. 38, I. Kokkoris, *The Development Of The Concept Of Collective Dominance In The ECMR – From Its Inception To Its Current Status*, *World Competition*, 2007, 30(3), 419-448, p. 426 and M. Schinkel, *Forensic Economics In Competition Law Enforcement*, J.C.L.&E., 2008, 4(1), 1-30, pp. 8 and 11.

⁵⁶ G. Stigler, *A Theory Of Oligopoly*, *The Journal Of Political Economy*, 1964, 72, available at http://cubbin.org.uk/comp_and_reg2009/week6/Stigler.pdf, 44-61, pp. 45-47, J. Kattan and W. Vigdor, above note 9, pp. 442 and 448, M. Coate, above note 41, p. 149, S. Stroux, above note 2, p. 9 and P. Denis, above note 52, p. 830.

particular the GC in *Airtours* set out these criteria as the necessary and cumulative elements which must be fulfilled in order to establish the adoption of a common consensus on coordination and the sustainability of such an understanding post-merger⁵⁷.

The Commission must assess the structural characteristics of the market under investigation in order to determine the extent to which it is possible to establish the *Airtours* criteria⁵⁸. The relevance of structural factors in the assessment of coordination and the effects of such characteristics on collusive behaviour derive from the findings of game theory, which have been fully implemented within the legal analysis of collective dominance in mergers. The assessment of the market characteristics is a fact finding exercise and the practice of the Commission is to examine these factors on a case-by-case basis⁵⁹. However, the competitive assessment is not based on a mechanistic application of a checklist of market characteristics that indicate the theoretical risk of coordination by merely ticking off a sufficient number of conditions⁶⁰. On the contrary, the Commission employs an overall assessment of the

⁵⁷ Note also the discussion on the *Airtours* criteria at Ch. 2. See also, K. Mehta, Comments On Switgard Feurstein's 'Collusion In Industrial Economics – A Survey', J.I.C.T., 2005, 5:3/4, 217-222, pp. 218-219.

⁵⁸ J. Kattan and W. Vigdor, above note 9, pp. 445 and 448-449 and Europe Economics, above note 2, pp. 27-28.

⁵⁹ D. Geradin, P. Hoferm F. Louis, N. Petit, M. Walker, The Concept Of Dominance In EC Competition Law, Global Competition Law Centre - Research Paper On The Modernization Of Article 82 EC, 2005, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=770144, 1-31, p. 10.

⁶⁰ Note also the discussion on the 'checklist approach' at Ch. 4. See also, B. Etter, above note 1, p. 125, S. Bishop, above note 55, pp. 38-39, M. Stenborg, above note 7, p. 383 and H. Haupt, Collective Dominance Under Article 82 E.C. And The E.C. Merger Control In The Light Of The *Airtours* Judgment, E.C.L.R., 2002, 23(9), 434-444, p. 436.

foreseeable impact of the concentration under investigation on competition in the light of the relevant structural factors⁶¹.

(3) Market Characteristics Facilitating Tacit Collusion

The assessment of a merger for collective dominance depends on the analysis of the relevant market characteristics post-merger and their influence on the future behaviour of the oligopolists, i.e. the structural characteristics of the market affect the firms' ability and incentive to collude⁶². The nature of such structural conditions is related to the demand and the supply structure of the relevant market as well as to the characteristics of the relevant product under investigation⁶³.

(I) Market Shares/Degree Of Concentration

Market shares and concentration thresholds provide a useful preliminary tool for the assessment of the relevant market structure and the competitive importance of both the merging parties and their competitors⁶⁴.

⁶¹ Horizontal Merger Guidelines para. 13.

⁶² See also, E. Kloosterhuis, above note 1, p. 90 and I. Kokkoris, above note 55, p. 426.

⁶³ S. Stroux, above note 3, p. 7 and A. Gallice, The Neglected Effects Of Demand Characteristics On The Sustainability Of Collusion, International Centre For Economics Research Working Paper Series, 2008, available at <http://econpapers.repec.org/paper/cprceprdp/6975.htm>, 1-15, p. 2.

⁶⁴ Horizontal Merger Guidelines para. 14. See also, S. Stroux, *US And EC Oligopoly Control*, Kluwer, First Edition, 2004, p. 233, A. Winckler and M. Hansen, Collective Dominance Under The EC Merger Control Regulation, C.M.L.R., 1993, 30, 787-828, p. 816 and S. Voigt and A. Schmidt, The Commission's Guidelines On Horizontal Mergers: Improvement Or Deterioration?, C.M.L.R., 2004, 41, 1583-1594, p. 1588.

A merger that increases the combined market shares of the largest firms in the relevant industry raises concerns about collective dominance, because the higher the sum of their market shares the higher their ability to exercise market power and to raise prices. Furthermore, the stability of market shares overtime is considered as a key indicator of collective dominance⁶⁵. In practice, the Commission considers that a proposed concentration may lead to collective dominance post-merger when there would be a duopoly holding a combined market share higher than 60% on the relevant market and there have been no substantial fluctuations of market shares in the past⁶⁶.

The degree of market concentration also provides an indication on the assessment of whether or not the relevant industry is suitable for the oligopolists to adopt and sustain a collusive policy⁶⁷. Thus, the higher the level of market concentration post-merger the more likely it is that the major firms will have the ability to coordinate and the higher their incentives to collude⁶⁸. Conversely, in low concentrated markets the incentives to collude are weaker and collusion is more difficult to be sustained⁶⁹. Concentration is measured by the

⁶⁵ *Nestle/Perrier* para. 46, *Kali and Salz* (Case IV/M.308 [1993], OJ L186/30 [1994], 4 CMLR 526 [1994]) para. 57, *Airtours* para. 111 and *ABF/GBI* paras 209, 306 and 339. See also, H. Friederiszick and F. Maier-Rigaud, above note 9, p. 106.

⁶⁶ *Nestle/Perrier* para. 119, *Kali and Salz* para. 52, *France v. Commission* para. 226, *Gencor* para. 207 and *ABF/GBI* para. 119. See also, C. Doerr, above note 51, p. 121 and J. Briones, Oligopolistic Dominance: Is There A Common Approach In Different Jurisdictions? A Review Of Decisions Adopted By The Commission Under The Merger Regulation, E.C.L.R., 1995, 16(6), 334-347, p. 337.

⁶⁷ Horizontal Merger Guidelines paras 14, 16 and 21.

⁶⁸ Y. Brozen, The Concentration-Collusion Doctrine, *Antitrust L.J.*, 1977, 46, 826-863, p. 836, E. Baranes, F. Mirabel and J. Poudou, Collusion Sustainability With Multimarket Contacts: Revisiting HHI Tests, 2009, available at <http://ideas.repec.org/p/lam/wpaper/09-05.html>, 1-15, p. 2 and S. Bishop, above note 55, p. 38.

⁶⁹ E. Baranes et al., above note 68, pp. 2 and 4.

concentration ratio of the most important players in an oligopoly and the Commission relies on the HHI, which is calculated as the sum of the squares of the market shares of the largest competitors, while the change of the HHI post-merger is known as delta and provides a safe harbour above which the likelihood of adverse competitive effects is raised⁷⁰. Nonetheless, the HHI is not a reliable predictor for the analysis of coordination, since it is unable to assess the interplay between the different structural factors and it implicitly considers collusion to be more likely in asymmetric market structures than in symmetric ones⁷¹.

(II) Number Of Competitors

The number of competitors which participate in the relevant market under investigation is decisive to the likelihood of coordination.

The presence of a small number of large firms in an oligopoly enhances the rivals' ability and their incentive to reach a consensus on a tacit collusive understanding, since it is easier to coordinate the behaviour of a limited number of competitors and also under such circumstances the market participants are closer to each other in terms of their

⁷⁰ Horizontal Merger Guidelines paras 16, 19 and 20. The Commission is unlikely to identify competition concerns where the aggregate HHI post-merger remains below 1000 or the HHI levels are between 1000 and 2000 and the delta is below 250 or an HHI above 2000 and a delta below 150. See also, D. Parker, above note 49, p. 424, B. Etter, above note 1, p. 134 and J. Theeuwes, *An Economic Analysis Of The New Regulation 139/2004*, Legal Issues Of Economic Integration, 2005, 32(2), 209-217, p. 215.

⁷¹ S. Davies and M. Olczak, *Tacit Collusion, Firm Asymmetries And Numbers: Evidence From EC Merger Cases*, 2007, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=982531, 1-33, pp. 9 and 16-17.

interdependence⁷². As regards the sustainability of collusion, the participation of a limited number of firms in the relevant industry increases market transparency that facilitates the identification as well as the punishment of deviations and this factor diminishes any cheating incentives⁷³.

The presence of numerous market participants renders it more difficult to reach a tacit collusive consensus, because this fact lowers oligopolistic interdependence, it increases the likelihood that the firms will have divergent preferences on the choice of the collusive equilibrium and the number of paired relationships rapidly grows thereby reducing the ability to identify a focal point of coordination⁷⁴. On the other hand, collusion becomes harder to sustain with numerous firms, because in such circumstances there is a strong incentive to deviate from the coordinated equilibrium which is attributable to the fact that each firm would normally have a relatively small market share and it would significantly increase its gains by undercutting the collusive price and capturing the entire market, i.e. for each firm the long-run benefit of maintaining the collusive understanding is reduced while the short-term gain from cheating is increased⁷⁵. Also, the existence of numerous market participants reduces the ability to monitor deviations from the common policy, since cheating will give rise to smaller quantity changes in demand⁷⁶.

⁷² *ABF/GBI* para. 147 and Horizontal Merger Guidelines para. 45. See also, U. Schwalbe and D. Zimmer, above note 4, pp. 239-240, Europe Economics, above note 2, p. 21 and A. Lofaro, When Imperfect Collusion Is Profitable, *Journal Of Economics*, 1999, 70(3), 235-259, p. 236.

⁷³ Horizontal Merger Guidelines para. 50. See also, I. Kokkoris, above note 55, p. 427 and U. Schwalbe and D. Zimmer, above note 4, p. 240.

⁷⁴ *ABF/GBI* para. 149. See also, M. Ivaldi et al., above note 42, p. 12.

⁷⁵ *ABF/GBI* para. 152. See also, M. Ivaldi et al., above note 42, p. 12.

⁷⁶ *ABF/GBI* para. 151. See also, S. Stroux, above note 3, p. 8.

The Commission's practice illustrates that it has principally focused on duopolistic market structures, as it has repeatedly held that the reduction from three to two major suppliers in an oligopoly would increase the likelihood of collective dominance, while only in *Airtours/First Choice* it held that a market would give rise to collective dominance by virtue of three players, and it has expressly considered such an outcome to be unlikely where it involves more than three or four suppliers⁷⁷.

(III) Symmetry

Symmetries refer to similarities in market shares, costs structures, capacities and the degree of vertical integration between the oligopolists, while what is required is that the firms are relatively although not completely symmetric⁷⁸.

Symmetries between the market participants facilitate the adoption of a common policy of coordination, because similar firms will have a commonality of interests and aligned incentives and perceptions as regards the coordinated equilibrium⁷⁹. Moreover, symmetries increase market transparency, since they reduce the degree of uncertainty that each undertaking faces in relation to the cost and demand conditions of its competitors.

⁷⁷ *Nestle/Perrier* para. 120, *Kali and Salz* paras 51 and 62, *Gencor/Lonrho* (Case IV/M.619 [1996], OJ L11/30 [1997], 4 CMLR 107 [1999]) para. 181, *Gencor* para. 206, *ABF/GBI* para. 284, *PriceWaterhouse/Coopers* (Case IV/M.1016 [1998], OJ L50/27 [1999]) para. 103.

⁷⁸ *ABF/GBI* para. 290 and Horizontal Merger Guidelines para. 48. See also, V. Rabassa and P. Christensen, above note 3, p. 232, J. Briones, above note 66, pp. 343-344 and S. Stroux, above note 2, p. 19.

⁷⁹ Horizontal Merger Guidelines para. 48. See also, Europe Economics, above note 2, pp. 27 and 80 and U. Schwalbe and D. Zimmer, above note 4, p. 245.

Additionally, symmetries enhance the stability of the collusive outcome by implying a similar ability to punish cheating⁸⁰.

Asymmetries reduce the oligopolists' ability to adopt a common understanding of coordination, because in such circumstances it is more difficult to achieve convergence of the competitors' views on the level of prices and output, while the choice of strategic dimensions is much less straightforward with the consequence that there may be no focal point for the formation of a common policy⁸¹. Furthermore, asymmetries diminish the retaliatory power of firms and the stability of collusion by creating different incentives to collude or deviate⁸². Nevertheless, asymmetries do not necessarily make tacit collusion impossible, since sharing the collusive profits unevenly with larger profits granted to the low-cost firms could potentially solve these problems⁸³.

(IV) Product Homogeneity

⁸⁰ I. Kokkoris, above note 55, p. 431.

⁸¹ R. Porter, Collusion In Industrial Economics: A Comment, J.I.C.T., 2005, 5:3/4, 231-234, p. 231 and Europe Economics, above note 2, p. 31.

⁸² *ABF/GBI* para. 297. See also, C. Caffarra and J. Ysewyn, Case Comment - Two's Company, Three's A Crowd: The Future Of Collective Dominance After The *Kali & Salz* Judgment, E.C.L.R., 1998, 19(7), 468-472, p. 470, Europe Economics, above note 2, p. 31, M. Stenborg, above note 7, pp. 373-374 and I. Kokkoris, Assessment Of Mergers Inducing Coordinated Effects In The Presence Of Explicit Collusion, World Competition, 2008, 31(4), 499-522, p. 510.

⁸³ M. Ivaldi et al., above note 42, p. 38.

The nature of the product is important, because homogeneous product markets are more susceptible to collusion than markets with differentiated products⁸⁴.

A high degree of product homogeneity facilitates the ability to reach a tacit coordinated policy, as it assists the identification of a focal point of collusion⁸⁵. Moreover, product homogeneity enhances transparency, since it makes the comparison of prices easier, which in turn leads to an improved detection of cheating that increases the ability to retaliate, it reduces the incentives to undercut and consequently it facilitates the sustainability of a collusive outcome⁸⁶.

The presence of products with heterogeneous characteristics generates market complexity which makes it difficult to reach a consensus on coordination⁸⁷. Also, product differentiation reduces the sustainability of collusion, because the presence of numerous products renders it harder to impose a credible retaliatory measure and this factor minimizes the ability to punish cheating⁸⁸. However, a certain degree of product differentiation does not

⁸⁴ *Kali and Salz* para. 57, *Gencor* para. 276 and *Exxon/Mobil* (Case IV/M.1383 [1999] para. 467. See also, K. Kuhn, above note 42, p. 115, M. Coate, above note 41, pp. 165 and 168, V. Rabassa and P. Christensen, above note 3, p. 231 and C. Engel, above note 22, p. 497.

⁸⁵ *ABF/GBI* para. 210 and Horizontal Merger Guidelines para. 45.

⁸⁶ *ABF/GBI* para. 188. See also, S. Stroux, above note 2, p. 24 and C. Engel, above note 42, p. 7.

⁸⁷ I. Kokkoris, above note 55, p. 429, U. Schwalbe and D. Zimmer, above note 4, p. 261 and J. Briones, above note 66, p. 340.

⁸⁸ S. Feuersten, above note 36, p. 169.

exclude the possibility of homogeneity in prices, particularly when there are focal points that would simplify pricing⁸⁹.

(V) Demand

In principle, a high growing or declining market is less conducive to coordination than a market that has stable or moderately growing demand⁹⁰.

It is easier to adopt a common collusive understanding when demand conditions are relatively stable, because in such circumstances the incumbent firms' incentives to compete are minimized for the reason that any attempts to engage in rigorous competition would be at the expense of one another and would possibly end in a damaging price war⁹¹. Also, a stable demand makes deviations more easily detectable as it helps to distinguish cheating from mere capacity adjustments attributable to the market conditions and accordingly such a market reduces the incentives to deviate while it simultaneously enhances the incentives to sustain a collusive understanding⁹².

⁸⁹ Horizontal Merger Guidelines para. 47. See also, J. Briones, above note 66, p. 339 and U. Schwalbe and D. Zimmer, above note 4, p. 262.

⁹⁰ G. Symeonidis, In Which Industries Is Collusion More Likely? Evidence From The UK, *J.Ind.Econ.*, 2003, 51, 45-74, p. 46, M. Stenborg, above note 7, p. 380, E. Kloosterhuis, above note 1, p. 82 and Europe Economics, above note 2, p. 78.

⁹¹ *Exxon/Mobil* para. 475 and Horizontal Merger Guidelines para. 45. See also, C. Doerr, above note 51, p. 122 and U. Schwalbe and D. Zimmer, above note 4, p. 269.

⁹² *Gencor* para. 237, *Airtours* para. 139 and *ABF/GBI* para. 232. See also, I. Kokkoris, above note 55, p. 431 and S. Baxter and F. Dethmers, Collective Dominance Under EC Merger Control - After *Airtours* And The Introduction Of Unilateral Effects Is There Still A Future For Collective Dominance?, *E.C.L.R.*, 2006, 27(3), 148-160, p. 155.

In a moderate growing market it is easier to sustain tacit collusion, since where there are high barriers to entry the gains from undercutting a competitor in the present period are relatively low as compared to the future profits of maintaining the collusive policy and this factor increases the incentives to stabilise the coordinated equilibrium⁹³. Furthermore, a modest growth rate does not encourage new entry and accordingly it protects the coordinated policy from any destabilisation caused by firms outside the collusive group⁹⁴.

High demand growth limits the firms' ability as well as their incentives to sustain a tacit collusive policy. Specifically, high demand growth produces demand fluctuations, which minimize the firms' ability to monitor rivals in order to determine whether changes in demand reflect deviation or whether they are caused by an overall alteration in industry demand and this in turn increases the difficulty to detect cheating as well as it reduces the efficacy of punishment⁹⁵. Moreover, the incentives to deviate are higher during periods of high growth, since a cheating firm has the ability to gain a large market share combined with a possible less effective punishment in the future periods of lower demand⁹⁶. Lastly, high

⁹³ K. Abbink and J. Brandts, Collusion In Growing And Shrinking Markets: Empirical Evidence From Experimental Duopolies, 2005, available at <http://www.nottingham.ac.uk/cedex/documents/papers/2005-03.pdf>, 1-21, p. 5, S. Feuersten, above note 36, p. 172 and M. Ivaldi et al., above note 42, pp. 26-27.

⁹⁴ *Gencor/Lonrho* para. 151.

⁹⁵ S. Stroux, above note 2, pp. 25-26, M. Coate, above note 41, p. 155 and Ş. Ardiyok, Comparative Analysis Of Collective Dominance, 2006, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1162187, 1-39, p. 7.

⁹⁶ M. Ivaldi et al., above note 42, pp. 30-31, J. Montero and J. Guzman, Output-Expanding Collusion In The Presence Of A Competitive Fringe, *J.Ind.Econ.*, 2010, 58(1), 106-126, pp. 119-120, Europe Economics, above note 2, p. 34 and C. Doerr, above note 51, p. 122.

demand growth may lead to new entry which minimizes the ability to collude and to sustain such collusion⁹⁷.

In declining markets collusion is difficult to be sustained, as the undertakings have less to gain from maintaining the collusive equilibrium and consequently there is a strong incentive to deviate from any tacit understanding in order to make additional short term profits while demand is still high, whilst the cost of punishment is less severe as it will occur in the future when demand has declined⁹⁸.

(VI) Elasticity Of Demand

Elasticity refers to the degree of consumer demand for a product that changes as a result of a change in its price and accordingly the ability of the oligopolists to raise their prices post-merger is directly dependent on the price elasticity of demand.

Inelasticity of demand increases the oligopolists' incentives to form a common collusive understanding, since in such circumstances demand will not be severely affected by a price increase to supra-competitive levels and consequently the coordinating firms will receive greater profits⁹⁹. Moreover, an inelastic demand stabilises a collusive policy, because it decreases

⁹⁷ Horizontal Merger Guidelines para. 72. See also, V. Rabassa and P. Christensen, above note 3, p. 231.

⁹⁸ *France v. Commission* para. 238. See also, M. Ivaldi et al., above note 42, p. 27, K. Kuhn, above note 42, p. 129, J. Venit, Two Steps Forward And No Steps Back: Economic Analysis And Oligopolistic Dominance After *Kali and Salz*, C.M.L.R., 1998, 35, 1101-1134, p. 1113, K. Abbink and J. Brandts, above note 93, p. 1 and Europe Economics, above note 2, p. 69.

⁹⁹ *Nestle/Perrier* para. 124, *Pilkington Technint/SIV* (Case IV/M.358 [1993], OJ L158/24 [1994]) para. 31, *Gencor/Lonrho* para. 149 and *ABF/GBI* para. 156. See also, C. Doerr, above note 51, pp. 121-122, A. Winckler

the incentives to cheat in view of the fact that any punishment will involve a significant reduction of profits for the deviating firm and in those circumstances it would be more profitable to coordinate rather than deviate¹⁰⁰.

High demand elasticity decreases the ability to collude, because if the consumers can easily switch between producers, a price increase imposed by the coordinating firms will lead to a significant fall in the demand for their products, which will be diverted to competitors outside the colluding group or new entrants and result in profit losses for the collusive firms¹⁰¹. Also, high elasticity provides a strong incentive to cheat, since in the situation where a firm deviates by implementing even a small cut in its prices, it will be able to market more of its output.

(VII) Innovation

High product or process innovation reduces the likelihood of coordination post-merger, while the feasibility of collusion is increased in a market where there is technological maturity¹⁰².

A collusive policy is less likely to be adopted in a market characterised by a high degree of innovation, because such markets are subject to rapid and unpredictable

and M. Hansen, above note 64, p. 819, Ş. Arđıyok, above note 95, p. 8, A. Gallice, above note 63, p. 11 and M. Coate, above note 41, p. 165.

¹⁰⁰ M. Ivaldi et al., above note 42, pp. 51-52 and I. Kokkoris, above note 55, p. 430.

¹⁰¹ Europe Economics, above note 2, p. 55 and S. Baxter and F. Dethmers, above note 92, p. 156.

¹⁰² S. Stroux, above note 2, p. 24, I. Kokkoris, above note 55, p. 431, J. Venit, above note 98, pp. 1125-1126, D. Ridyard, above note 26, p. 260 and Europe Economics, above note 2, p. 79.

technological changes that produce significant market instability¹⁰³. Also, innovation destabilises coordination, since a firm which has developed a new or improved product would be less motivated to sustain the collusive equilibrium for the reason that innovation allows such a competitor to gain a significant advantage over its rivals thereby increasing its incentive to deviate and reducing the possible effect of retaliation on such a firm¹⁰⁴.

Conversely, a technologically mature market facilitates the sustainability of a coordinated policy, because in those circumstances no firm would cheat on the collusive consensus as it would not gain a significant advantage over its rivals and also such a market contributes to the detection of deviations¹⁰⁵.

(VIII) Multimarket Contacts

Multimarket contacts refer to the meeting of firms in more than one market¹⁰⁶. Multimarket contacts create reciprocal dependencies between the market players and increase the frequency of their interaction, which heighten their incentives to implement a common collusive understanding and increase their ability to identify a focal point of such a policy¹⁰⁷. Also, multimarket contacts increase the transparency of the market, as they assist the firms to obtain information about their competitors¹⁰⁸. Furthermore, such contacts facilitate the sustainability of collusion by softening asymmetries that arise in individual markets, while

¹⁰³ Horizontal Merger Guidelines para. 45. See also, V. Rabassa and P. Christensen, above note 3, p. 232.

¹⁰⁴ *ABF/GBI* paras 199 and 299. See also, U. Schwalbe and D. Zimmer, above note 4, pp. 266-267 and K. Miyagiwa, Collusion And Research Joint Ventures, *J.Ind.Econ.*, 2009, 57(4), 768-784, pp. 773 and 781.

¹⁰⁵ J. Briones, above note 66, p. 343 and Europe Economics, above note 2, p. 79.

¹⁰⁶ *ABF/GBI* para. 202.

¹⁰⁷ S. Stroux, above note 3, p. 11 and E. Baranes et al., above note 68, p. 4.

¹⁰⁸ I. Kokkoris, above note 55, p. 432 and Europe Economics, above note 2, p. 85.

they also increase the possibility and severity of punishment by giving a further opportunity to retaliate in case a deviation occurs, since cheating in one market can be wiped out by punishment in all markets or in another different market¹⁰⁹.

(VIV) Structural Links

Structural links between the oligopolists increase the likelihood of coordinated behaviour¹¹⁰. In particular, structural links foster the ability to collude by creating a large degree of commonality of interests between the market participants and diminish their incentive to compete, since in the presence of such links the reduction of the competitors' profits through aggressive competition would also adversely affect the deviating firm's own profits¹¹¹. Moreover, structural links lead to heightened market transparency, as they provide a means for the exchange of information between the oligopolists and accordingly they facilitate the detection of deviations¹¹². Lastly, structural links enhance retaliation, because they increase the scope of punishment¹¹³.

(X) Capacity

¹⁰⁹ *Gencor/Lonrho* para. 158, *ABF/GBI* paras 202, 204, 244 and 353 and Horizontal Merger Guidelines para. 55. See also, U. Schwalbe and D. Zimmer, above note 4, pp. 263-265, J. Motis, *Mergers And Acquisition Motives*, 2007, available at <http://economics.soc.uoc.gr/wpa/docs/paper2mottis.pdf>, 1-30, p. 16 and M. Ivaldi et al., above note 42, p. 48.

¹¹⁰ *Kali and Salz* para. 57 and *Exxon/Mobil* para. 480. See also, M. Ivaldi et al., above note 42, p. 53 and Europe Economics, above note 2, p. 87.

¹¹¹ Horizontal Merger Guidelines para. 48. See also, V. Rabassa and P. Christensen, above note 3, p. 233 and U. Schwalbe and D. Zimmer, above note 4, p. 253.

¹¹² *Exxon/Mobil* para. 480.

¹¹³ *Gencor/Lonrho* para. 158.

Another factor relevant in the assessment of the likelihood of coordination post-merger revolves around the existence of excess capacity and capacity constraints.

A factor which affects the likelihood of collusion is excess capacity¹¹⁴. On the one hand, the existence of symmetrical excess capacity among the oligopolists stabilises coordination, since it enables one firm to discipline another in case a deviation occurs, i.e. when demand is inelastic excess capacity possessed by all the oligopolists increases the severity of punishment and strengthens the ability to retaliate against any deviator¹¹⁵. Additionally, excess capacity possessed by the colluding group can deter potential competitors from entering the market¹¹⁶. On the other hand, a firm which individually has the ability to afford high excess capacity may find collusion less attractive, because such a firm can attain greater short-run profits by deviating and accordingly this factor increases the difficulty to sustain tacit collusion¹¹⁷.

Moreover, capacity constraints may facilitate or hinder collusion¹¹⁸. On the one hand, a firm will have an incentive to deviate from the coordinated policy if it can easily increase its output and if it cannot be punished by its competitors, because of the existence of capacity constraints on the latter which reduce their retaliatory power¹¹⁹. On the other hand, capacity constraints on all the colluding firms lowers their incentive to cheat, as the profits from

¹¹⁴ Europe Economics, above note 2, p. 34.

¹¹⁵ *ABF/GBI* paras 242 and 290. See also, V. Rabassa and P. Christensen, above note 3, p. 232 and J. Briones, above note 66, pp. 343-344.

¹¹⁶ S. Stroux, above note 3, p. 9.

¹¹⁷ J. Venit, above note 98, p. 1114 and S. Stroux, above note 3, pp. 8-9.

¹¹⁸ *ABF/GBI* para. 296.

¹¹⁹ U. Schwalbe and D. Zimmer, above note 4, p. 251.

deviating will be small if the cheating firm cannot easily expand its output and in such circumstances the competitors have less to gain from undercutting their rivals¹²⁰.

(XI) Entry Barriers/Potential Competition

Barriers to entry relate to the ability of firms outside a particular market to constrain the incumbent firms' exercise of market power within that market¹²¹. Barriers to entry may take various forms such as legal barriers, vertical integration, economies of scale, sunk costs, customer loyalty etc.¹²².

The existence of high entry barriers facilitates the sustainability of a collusive policy, because third parties will not easily penetrate the market, they will not be able to disrupt the coordinated understanding by undercutting the collusive price and accordingly such a factor shields the coordinating group from competition exercised by outsiders¹²³.

In the presence of low entry barriers any attempt of the colluding firms to raise their prices at supra-competitive levels would trigger entry, since it would be profitable for an outsider to enter the market and set lower prices in order to capture the whole market demand, which would

¹²⁰ *ABF/GBI* para. 296. See also, S. Feuersten, above note 36, p. 169.

¹²¹ S. Stroux, above note 2, p. 22.

¹²² *Nestle/Perrier* paras 92-98, *ABF/GBI* paras 160-163 and 170-171 and Horizontal Merger Guidelines para. 71. See also, J. Vickers, above note 25, p. 53, O. Budzinski, above note 37, p. 302, H. Friederiszick and F. Maier-Rigaud, above note 9, p. 106 and S. Martin, above note 3, p. 115.

¹²³ *Nestle/Perrier* para. 130, *Gencor/Lonrho* para. 154, *Exxon/Mobil* para. 481, *ABF/GBI* para. 153 and Horizontal Merger Guidelines para. 70. See also, I. Kokkoris, above note 55, p. 428, J. Venit, above note 98, pp. 1124-1125 and J. Theeuwes, above note 70, p. 216.

frustrate the objective of coordination, it would jeopardise the sustainability of coordination and it would counteract the effects of anticompetitive mergers¹²⁴.

Barriers to entry are closely associated with the factor of potential competition, which refers to firms that threaten to enter the market attracted by the supra-competitive profits that could be earned, i.e. the threat of competition rather than actual competition¹²⁵. Potential competition makes collusion unlikely, because it reduces the incentive to sustain the coordinated policy and it increases the desirability of cheating as it enhances the importance of short-term profits¹²⁶. Potential competition is acknowledged only if entry is likely, it can be expected to occur within a limited time span and it is sufficient in its magnitude, character and scope to offset any anticompetitive effects¹²⁷.

(XII) Fringe Or Maverick Firms

The presence of fringe firms or of a maverick competitor may constrain and destabilise a coordinated policy¹²⁸.

¹²⁴ *Airtours* para. 269, *ABF/GBI* para. 159 and Horizontal Merger Guidelines para. 70. See also, K. Kuhn, above note 42, p. 129, H. Friederiszick and F. Maier-Rigaud, above note 9, p. 106, U. Schwalbe and D. Zimmer, above note 4, p. 255, Europe Economics, above note 2, pp. 55 and 75, K. Huschelrath, Detection Of Anticompetitive Horizontal Mergers, J.C.L.&E., 2009, 5(4), 683-721, p. 696, M. Ivaldi et al., above note 42, p. 16 and P. Denis, above note 52, p. 835.

¹²⁵ *Airtours* paras 262 and 266. See also, S. Martin, above note 3, p. 58 and W. Leaman, Its Not Always Nice To Play Nice: Collusion, Competition And Development, Pacific McGeorge Global Business And Development Law Journal, 2007, 20, 289-316, p. 304.

¹²⁶ *ABF/GBI* para. 159.

¹²⁷ *Nestle/Perrier* para. 91, *ABF/GBI* para. 265 and Horizontal Merger Guidelines paras 68-75. See also, K. Huschelrath, above note 124, pp. 696 and 699.

¹²⁸ Europe Economics, above note 2, pp. 85-86.

A maverick firm is an aggressive competitor, who exhibits a market conduct that differs from its rivals due to its competitive advantages, such as lower cost structures, higher production capacity or improved product quality¹²⁹. The existence of a maverick firm in an oligopoly decreases the likelihood of sustainable collusion, if such a firm is capable of output expansion and declines to be part of the collusive understanding¹³⁰. Accordingly, a merger may constrain a collusive equilibrium in the situation where it involves the creation of a maverick firm post-merger. Conversely, a merger acquiring and thereby eliminating a maverick will tend to facilitate collusion, since in such a circumstance the possibility of collusive pricing is raised¹³¹.

Fringe firms are those competitors which do not participate in the coordinated group and are individually so small that they do not have a significant effect on the market parameters. The importance of fringe competitors lies in that taken as a whole they may be able to respond to a price raise initiated by the colluding firms and lower their prices or increase their output in order to capture more of the profitable market, thus provoking a reduction in the market price which in turn counteracts the coordinated policy¹³². For such an outcome to occur, the group of fringe firms as a whole must have strong market presence and

¹²⁹ *ABF/GBI* para. 278. See also, M. Ivaldi et al., above note 42, p. 55.

¹³⁰ I. Kokkoris, *The Reform Of The European Control Merger Regulation In The Aftermath Of The Airtours Case - The Eagerly Expected Debate: SLC v. Dominance Test*, E.C.L.R., 2005, 26(1), 37-47, p. 39 and M. Ivaldi et al., above note 42, p. 55.

¹³¹ *ABF/GBI* paras 139 and 280 and Horizontal Merger Guidelines para. 42. See also, K. Kuhn, above note 42, p. 134 and J. Briones, above note 66, p. 338.

¹³² *Airtours* para. 213. See also, Europe Economics, above note 2, p. 23 and U. Schwalbe and D. Zimmer, above note 4, p. 256.

the ability as well as the incentive to exercise a competitive constraint so as to hinder the coordinated conduct of the oligopolists¹³³. The strength of fringe firms depends on their market shares, the existence of capacity constraints on such firms and the differences between their cost structures as opposed to the cost structures of the large players¹³⁴. Conversely, the inability of fringe firms to pose a sufficient competitive constraint on the oligopolists makes collusion more likely to evolve¹³⁵.

(XIII) Countervailing Buyer Power

The assessment of countervailing buyer power focuses on the extent to which buyers may counteract the supra-competitive prices imposed upon them by the colluding firms¹³⁶. The degree of countervailing power of buyers is principally linked to their size, as the more concentrated is the buyer side the lesser is the ability of sellers to elevate their prices¹³⁷.

A strong countervailing buyer power may undermine the sustainability of coordination by offering large and long term supply contracts to the members of the collusive group, which increase their incentive to cheat on the coordinated consensus and they reduce

¹³³ *Airtours* paras 213 and 261. See also, S. Baxter and F. Dethmers, above note 92, pp. 152-153, J. Venit, above note 98, p. 1116 and S. Stroux, above note 2, p. 21.

¹³⁴ U. Schwalbe and D. Zimmer, above note 4, p. 256 and J. Montero and J. Guzman, above note 96, p. 109.

¹³⁵ *Airtours/First Choice* para. 158 and *ABF/GBI* para. 256.

¹³⁶ *ABF/GBI* para. 266 and Horizontal Merger Guidelines para. 64. See also, D. Geradin et al., above note 59, p. 21, H. Friederiszick and F. Maier-Rigaud, above note 9, p. 106 and J. Venit, above note 98, p. 1127.

¹³⁷ Horizontal Merger Guidelines para. 64. See also, Europe Economics, above note 2, pp. 55 and 84 and K. Huschelrath, above note 124, p. 699.

the colluding firms' frequency of interaction¹³⁸. Alternatively, strong buyers may reduce the ability of the colluding firms to increase their prices post-merger by credibly threatening to start producing the goods in question themselves¹³⁹. Also, strong buyers may switch to alternative sources of supply or encourage new entry into the supplier's market¹⁴⁰.

An insignificant buyer power facilitates collusion, as it lacks the ability to constrain a potential post-merger price increase by the collusive group¹⁴¹. Also, arrangements to restrict competition are more likely to be stabilised when the buyer side is unconcentrated and fragmented, because such a factor reduces the likelihood of cheating¹⁴².

(XIV) Past Behaviour

The assessment of past behaviour facilitates the understanding of the main competitive forces present in the relevant market and it assists the appraisal of the impact of the concentration on the likelihood of post-merger coordination¹⁴³. Specifically, past collusive conduct may assist the establishment of coordination, provided that the market

¹³⁸ *Pilkington/SIV* para. 56 and *ABF/GBI* para. 266. See also, Europe Economics, above note 2, p. 35 and P. Denis, above note 52, p. 836.

¹³⁹ Horizontal Merger Guidelines para. 65.

¹⁴⁰ *Enso/Stora* (Case IV/M.1225 [1998], OJ L254/9 [1999]) para. 91 and Horizontal Merger Guidelines para. 65. See also, S. Stroux, above note 2, p. 23, S. Baxter and F. Dethmers, above note 92, p. 154 and Europe Economics, above note 2, pp. 35-36.

¹⁴¹ L. Telser, *Competition, Collusion And Game Theory*, Transaction Publishers, First Edition, 2007, p. 200 and V. Rabassa and P. Christensen, above note 3, p. 233.

¹⁴² I. Kokkoris, above note 55, p. 438.

¹⁴³ *Nestle/Perrier* paras 59 and 121, *Gencor/Lonrho* para. 168, *Pilkington/SIV* para. 32, *Kali and Salz* para. 57, *ABF/GBI* paras 137 and 228. See also, V. Rabassa and P. Christensen, above note 3, p. 234, J. Briones, above note 66, p. 346 and J. Venit, above note 98, p. 1133.

characteristics have not been substantially modified from the previous occasion of collusion, the incentives of the undertakings would not be altered as a result of the concentration and the type of past collusive conduct observed is broadly similar to the type of collusion anticipated in the post-merger market¹⁴⁴. Thus, evidence of past collusive conduct may assist the Commission to assess whether the oligopolists may adopt a common policy of tacit or even explicit collusion post-merger. Also, past cartel behaviour may provide an indication as to whether credible deterrent mechanisms are feasible to be established post-merger as well as it may facilitate the identification and evaluation of external competitive constraints¹⁴⁵.

(D) CRITICISM OF GAME THEORY

Various types of criticism have been formulated in relation to the results of game theoretic models as well as on the assumptions that underline such models. This criticism casts doubt on the unitary value of game theory to predict merger outcomes and exposes its problematic features.

(1) The Oligopoly Problem

Criticism as regards the results of game theoretic analysis on tacit collusion has grown and such criticism is directly related to the oligopoly problem. Specifically, it has been claimed that game theory produces a large variety of possible outcomes in oligopolistic markets, as each model is based on a number of assumptions, but remains imprecise on the process of equilibrium selection by the oligopolists and on the question as to how firms

¹⁴⁴ Horizontal Merger Guidelines para. 43. See also, G. Robert and C. Hudson, Past Coordination And The Commission Notice On The Appraisal Of Horizontal Mergers Under The Council Regulation On The Control Of Concentrations Between Undertakings, E.C.L.R., 2004, 25(3), p. 167 and I. Kokkoris, above note 82, p. 507.

¹⁴⁵ I. Kokkoris, above note 82, pp. 508 and 510 and G. Robert and C. Hudson, above note 144, 163-168, p. 168.

actually coordinate¹⁴⁶. Also, game theory sets out the general conditions under which the oligopolists may collude, but it cannot predict whether or not the firms will indeed coordinate once certain conditions are met¹⁴⁷. In particular, while collusion can sometimes be excluded for theoretical reasons, there is no way to assert that such conduct is the only possible outcome under a particular set of market circumstances, since even where the relevant market structure is highly favourable towards collusion, the firms may choose not to coordinate but to vigorously compete¹⁴⁸. Hence, the discussion on which factors make it easier or more difficult to achieve a collusive equilibrium relies merely on a degree of plausibility, because there is always a possibility that the firms may fail to coordinate for various reasons, even in market settings which increase the likelihood of coordination¹⁴⁹. Additionally, the predictions of game theoretic models as to how changes in the market structure affect the likelihood of collusion highly depend on what parameters each model is using which in turn limit the value of their results, i.e. these models are sensitive to the initial assumptions about the firms' reactions which have been adopted¹⁵⁰. This vagueness on the actual post-merger behaviour of the firms in the context of specific market circumstances, which relates to the multiplicity of

¹⁴⁶ J. Briones, above note 3, pp. 118-119, G. Werden, above note 21, pp. 730-731, J. Wright, *Overshot The Mark? A Simple Explanation Of The Chicago School's Influence On Antitrust*, C.P.I., 2009, 5(1), 1-34, p. 9 and H. Friederiszick and F. Maier-Rigaud, above note 9, p. 92.

¹⁴⁷ U. Schwalbe and D. Zimmer, above note 4, pp. 306-307 and J. Kattan and W. Vigdor, above note 9, pp. 444, 448 and 455-456.

¹⁴⁸ F. Mezzanotte, above note 3, pp. 5-6, S. Bishop, above note , p. 38 and K. Kuhn, above note 42, p. 139.

¹⁴⁹ S. Feuersten, above note 36, p. 168 and Europe Economics, above note 2, p. 20.

¹⁵⁰ H. Hovenkamp, *Harm To Competition Under The 2010 Horizontal Merger Guidelines*, 2011, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1702843, 1-17, p. 11, B. Etter, above note 1, p. 122 and M. Slade, *Market Power And Joint Dominance In UK Brewing*, J.Ind.Econ., 2004, 52, 133-163, p. 136.

possible equilibria, makes game theory problematic for predicting merger outcomes¹⁵¹. In turn, these problems have affected the application of the concept of collective dominance in mergers, as evidenced by the low level of its enforcement and the Commission's difficulty to discharge the burden of proof in order to prohibit a concentration on the basis of coordinated effects, i.e. the oligopoly problem has produced complexities in the regulation of collective dominant positions¹⁵².

Another line of criticism supports that since game theoretic models are merely 'possibility theories', i.e. they are based on specific assumptions and describe what might happen in specific cases, they can only be relied upon in order to predict the effects of a merger if they state a testable hypothesis, survive a falsification test and facilitate the resolution of the dispute in question¹⁵³. On the one hand, possibility models, given their assumptions, must generate testable hypotheses for the future state of competition¹⁵⁴. Nevertheless, game theoretic models present the problem that it is often difficult to formulate

¹⁵¹ J. Ezrielev and J. Ordovery, The 2010 Horizontal Merger Guidelines: A Static Compass In A DynamicWorld?, 2010, available at http://www.americanbar.org/content/dam/aba/publishing/antitrust_source/Oct10_Ezrielev10_21.authcheckdam.pdf, 1-6, p. 5.

¹⁵² Note also the discussion on the low levels of enforcement in collective dominance under the Merger Regulation at Ch. 5.

¹⁵³ M. Coate and J. Fischer, Daubert, Science And Modern Game Theory, Implications For Merger Analysis, 2009, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1268386, 1-68, pp. 3, 30-31, 46, 49-51 and 67, F. Fisher, Games Economists Play: A Noncooperative View, Rand Journal Of Economics, 1989, 20(1), 113-124, pp. 118 and 120 and B. Kobayashi, Game Theory And Antitrust: A Post-Mortem, Geo. Mason L. Rev., 1996-1997, 5, 411-421, pp. 412-413.

¹⁵⁴ M. Coate and J. Fischer, above note 153, pp. 31 and 48.

testable hypotheses related to the models' critical assumptions¹⁵⁵. On the other hand, in order to test the predictions and support the hypotheses of a specific game theoretic model, empirical evidence drawn from natural experiments associated with comparable changes in structure would be needed, i.e. 'systematic events' or 'shock events', while without such evidence they would require case-specific support before being used to predict the effects of a merger¹⁵⁶. Thus, game-theoretic models need evidence supportive of their testable hypotheses and it has been suggested that merely theoretical analysis should be excluded, whilst such models present the problem that they have not been subjected to any systematic empirical verification¹⁵⁷. Lastly, a case-specific analysis would also need to show that the game theoretic analysis is also relevant to the case at hand and in that regard a chain of causation must be established¹⁵⁸. Essentially, these requirements present a strict framework that demands game theoretic models to be strongly tied to the facts of the case, while in order to survive falsification they must explain past outcomes of the competitive process in the relevant market.

(2) Behavioural Economics

Game theory is based on the assumption that market participants are rational, self-interested profit maximizers with perfect willpower and such an assumption has been directly integrated within the analysis of coordinated effects in mergers¹⁵⁹. However, behavioural

¹⁵⁵ M. Burtis, *Modern Industrial Organisation: A Comment*, *Geo. Mason L. Rev.*, 2003-2004, 12, 39-46, p. 42.

¹⁵⁶ M. Coate and J. Fischer, above note 153, pp. 4, 45, 49, 51-52 and 56 and M. Burtis, above note , p. 42.

¹⁵⁷ M. Coate and J. Fischer, above note 153, pp. 28, 44 and 49, B. Kobayashi, above note 153, pp. 412 and 414 and M. Burtis, above note 155, pp. 42 and 45-46.

¹⁵⁸ M. Coate and J. Fischer, above note 153, pp. 29-30.

¹⁵⁹ A. Reeves and M. Stucke, *Behavioral Antitrust*, *Indiana Law Journal*, 2011, available at http://ilj.law.indiana.edu/articles/86/86_4_reeves.pdf, 1527-1586, p. 1528, T. Rosch, *Managing Irrationality*:

economics condemn this approach and emphasise on departures of human conduct from rational performance by supporting the premise that the behaviour of individuals within the firm is imperfectly rational as they rely on heuristics in making decisions and bias can affect their choices, they have limited willpower since they may behave against their stated preferences due to an overvaluation or undervaluation of present or future welfare prospects and they may act contrary to their economic self-interest in situations where they are aspired by a norm of fairness¹⁶⁰.

Several principles which derive from behavioural economics imply that the oligopolists may tacitly collude in settings where game theory would predict a competitive outcome or they may refrain from colluding in situations where a rational choice would point

Some Observations On Behavioral Economics And The Creation Of The Consumer Financial Protection Agency, 2010, available at http://www.ftc.gov/sites/default/files/documents/public_statements/managing-irrationality-some-observations-behavioral-economics-and-creation-consumer-financial/100106financial-products.pdf, 1-16, p. 2, M. Stucke, Behavioral Economists At The Gate: Antitrust In The Twenty-First Century, 2007, available at <http://luc.edu/media/lucedu/law/students/publications/llj/pdfs/Stucke.Online.3.0.pdf>, 513-591, p. 545 and J. Wright and J. Stone, Misbehavioural Economics: The Case Against Behavioural Antitrust, Cardozo Law Review, 2012, 33(4), 1517-1553, p. 1538.

¹⁶⁰ L. Arnaudo, The Quest For Behavioral Antitrust: Beyond The Label Battle, Towards A Cognitive Approach, 2013, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1962515, 1-25, p. 4, G. Werden, L. Froeb and M. Shor, Behavioral Antitrust And Merger Control, 2010, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1612282, 1-17, p. 10, A. Reeves and M. Stucke, above note 159, pp. 1532-1538, M. Stucke, above note 159, p. 527, N. Petit, The 'Oligopoly Problem' In EU Competition Law, 2012, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1999829, 1-78, p. 11 and M. Stucke, The Implications Of Behavioural Antitrust, 2012, available at [http://search.oecd.org/officialdocuments/displaydocumentpdf/?cote=DAF/COMP/WD\(2012\)12&docLanguage=En](http://search.oecd.org/officialdocuments/displaydocumentpdf/?cote=DAF/COMP/WD(2012)12&docLanguage=En), 1-26, pp. 2 and 15.

towards collusion. In particular, risk-averse bias may affect the individuals' cost-benefit analysis by leading them to overestimate the costs of the rivals' retaliation and decide to stick irrationally to the tacit collusive policy¹⁶¹. Conversely, cheating may occur contrary to the estimations of the cost-benefit analysis under game theory in situations where overconfidence bias may cause individuals to overestimate the likelihood to avoid detection in case of deviation or where hyperbolic discounting may lead individuals to place an exceptionally high weight on short-term profits and decide to cheat despite the larger future revenues¹⁶². Furthermore, reputational considerations may affect the individuals' decision to sustain or abstain from a collusive strategy, as an executive may refrain from adopting a profitable price cutting strategy, because he is reluctant to attract a reputation of being a cheater or on the contrary it may prevent an executive from approving the adoption of a collusive strategy and charge supra-competitive prices if that could damage the firm's reputation to its customers¹⁶³. Lastly, individual decision makers may be disinclined to approve the participation in a collusive scheme and raise prices due to fairness considerations¹⁶⁴.

Behavioural economics also provide insights in relation to some structural features that are taken into account in the analysis of coordinated effects. Thus, the behavioural economics literature illustrates that demand elasticity may be affected by framing effects, as the consumers are more sensitive to price increases than when the manufacturer eliminates a discount even if they have an equivalent impact, while the consumers would also be risk-

¹⁶¹ N. Petit, above note 160, p. 11 and J. Wright and J. Stone, above note 159, p. 1532.

¹⁶² G. Werden et al., above note 160, p. 10, D. Langevoort, *The Behavioral Economics Of Mergers And Acquisitions*, 2010, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1692777, 2-21, p. 10, A. Reeves and M. Stucke, above note 159, pp. 1535 and 1569 and J. Wright and J. Stone, above note 159, p. 1531.

¹⁶³ A. Reeves and M. Stucke, above note 159 p. 1579 and N. Petit, above note 160, p. 11.

¹⁶⁴ M. Stucke, above note 159, pp. 530 and 561 and A. Reeves and M. Stucke, above note 159, p. 1537.

seeking when avoiding a loss and thus more willing to switch to alternative products¹⁶⁵. Moreover, strong buyers may not provide a countervailing power to a collusive scheme, as their reactions might be dependent upon how the price increase is framed¹⁶⁶. Furthermore, the individuals' tendency to be risk-averse in relation to gains may cause entry not to occur, even when it is economically rational and a profit maximising response, thereby failing to defeat the collusive group's price increase¹⁶⁷.

Despite the fact that behavioural economics may provide insights into ways to further sharpen the analytical tools of merger review, they cannot at present accurately facilitate the identification of anticompetitive from pro-competitive concentrations, since they fail to offer a rigorous basis for the systematic prediction of whether an individual will demonstrate any irrational bias that would affect its decisions, due to the interaction of multiple biases within a single individual as well as doubts about whether the individual's bias will survive the group level or the incentives to view things through an unbiased lens¹⁶⁸. To that extent, behavioural economics do not set out a more accurate theory for predicting merger effects than game theoretic predictions, as they also suffer from the multiplicity of outcomes and they are

¹⁶⁵ M. Stucke, New Antitrust Realism, 2009, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1323815, 1-22, pp. 8-9.

¹⁶⁶ A. Reeves and M. Stucke, above note 159, p. 1567 and M. Stucke above note 159, p. 561.

¹⁶⁷ M. Stucke above note 159, pp. 570-571.

¹⁶⁸ G. Werden et al., above note 160, p. 13, A. Reeves and M. Stucke, above note 159, pp. 1540, 1544-1545, 1553 and 1577, T. Rosch, above note 159, p. 8, J. Wright and J. Stone, above note 159, pp. 1522-1526, 1534-1535 and 1551 and K. Simon, Reaction To Prof. Donald C. Langevoort's 'The Behavioral Economics Of Mergers And Acquisitions', available at <http://users.wfu.edu/palmitar/Courses/M&A%20Law/Student%20Papers/Simon%20M&A%20Paper.doc>, 1-6, p. 2.

unable to provide a single organizing principle for merger assessment. In addition, behavioural economics are problematic due to their sole reliance on subjective elements of human conduct, whilst game theory derives conclusions on likely market behaviour on the basis of objective market characteristics. Nevertheless, behavioural economics could prospectively improve merger analysis, if they could provide tested learning on individual decision making.

(3) Experimental Economics

Experimental economics have provided some important insights in relation to the likelihood of collusion in laboratory settings. Specifically, experimental evidence illustrate that the number of firms has a crucial effect on market behaviour, as even though collusion can emerge without any communication among subjects in duopolies, such outcomes are very rare with three firms and non-existent with four or more firms¹⁶⁹. Also, even though collusion in duopolies has been found to exist in both price competition games with homogeneous goods and in quantity games, the variable of competitive interaction plays an important role as in quantity duopoly games collusion has been found to materialise only in some cases,

¹⁶⁹ M. Dufwenberg and U. Gneezy, Price Competition And Market Concentration: An Experimental Study, *International Journal Of Industrial Organisation*, 2000, 18, 7-22, pp. 19-20, S. Huck, H. Normann and J. Oechssler, Two Are Few And Four Are Many: Number Effects In Experimental Duopolies, *Journal Of Economic Behaviour And Organization*, 2004, 53, 435-446, p. 444, F. Maier-Rigaud, D. Wiesen and K. Parplies, Experimental Economics And Competition Policy: Unilateral And Coordinated Effects In Competition Games, *E.C.L.R.*, 2008, 29(7), 408-417, pp. 413-414, J. Harrington, Evaluating Mergers For Coordinated Effects And The Role Of 'Parallel Accommodating Conduct', 2012, available at http://krieger2.jhu.edu/economics/wp-content/uploads/pdf/papers/wp601_harrington.pdf, 1-17, p. 12 and N. Petit, above note 160, p. 14.

whilst in price duopoly games collusion occurred in the majority of situations¹⁷⁰. Furthermore, contrary to game theoretic dictations, experimental findings illustrate that repeated interaction is not a necessary ingredient for the achievement of tacit collusion, since it can occur even when there is random matching, i.e. the participants play the game several times but do not face the same rivals in each round, and suggest that it is the build-up of experience that plays the most significant role in achieving collusive equilibria rather than mutual cooperation achieved through repeated interaction of the same market participants¹⁷¹. Lastly, experimental evidence reveals that an infinite number of periods is not required to make cooperation possible, as collusion can be sustained in duopolies even when there is a finite number of rounds to be played¹⁷².

These results highlight some fundamental limitations of game theory to predict whether a merger will enable the competitors to collude, which could suggest that the Commission's exact application of the *Airtours* test in *Sony/BMG* and *ABF/GBI* may not be appropriate. Nevertheless, these findings should not merely be seen as a criticism towards the game theoretic analysis, but they should also be contrasted with the Commission's gradually reduced focus on tackling collusion in merger review, as experimental results essentially reveal that such anticompetitive conduct may occur even more often than the estimations of game theory and accordingly they would suggest an increased emphasis on enforcement. In any case it should be pointed out that, despite the significance of their results, experimental economics are somewhat degraded by the fact that laboratory experiments cannot precisely

¹⁷⁰ M. Dufwenberg and U. Gneezy, above note 169, p. 7, S. Huck et al., above note 169, pp. 435 and 444 and F. Maier-Rigaud et al., above note 169, pp. 413 and 415.

¹⁷¹ M. Dufwenberg and U. Gneezy, above note 169, pp. 9 and 19 and S. Huck et al., above note 169, pp. 437 and 441.

¹⁷² F. Maier-Rigaud et al., above note 169, p. 415 and S. Huck et al., above note 169, p. 437.

reflect real world economic situations, as for example the subjects of these experiments, be it either college students or random individuals, cannot be equated with ‘real-life’ executives or firms competing in pragmatic market circumstances. Thus, the findings of experimental economics are debatable due to the particular methodology used and accordingly their applicability to make wide policy prescriptions should be questioned.

(4) The Interface Between Law And Economics

The final issue to be considered concerns the fact that, despite the strong interface between law and economics, which is illustrated by the direct integration of the economic theory of tacit collusion and the factors set out therein in the legal analysis of collective dominance in mergers, there are also some distinctive elements. Firstly, economic theory is indifferent as to whether collusion is tacit or explicit, since from an economic point of view the focus is on the result of both types of collusion, as measured in terms of supra-competitive prices, but not on the specific type of collusion¹⁷³. On the contrary, the legal analysis centres on the distinction of the type of collusion examined, since the quality of evidence that is required in order to prove tacit collusion is different to those which must be presented in order to demonstrate explicit collusion¹⁷⁴. Secondly, the focus of economic theory is on whether prices will rise or fall as a result of a given set of factors. Conversely, the emphasis of the legal analysis is on the reason why prices will be increased or decreased post-merger, as for example both mere parallel behaviour and tacit coordination may lead to the same heightened level of prices in a market but only the latter constitutes anticompetitive behaviour¹⁷⁵. Lastly, economic theory is mainly based on assumptions and focuses on

¹⁷³ G. Monti, *EC Competition Law*, Cambridge, First Edition, 2007, p. 309 and S. Stroux, above note 2, p. 35.

¹⁷⁴ Note also the discussion on the evidentiary requirements related to each type of collusion at Ch. 2.

¹⁷⁵ Note also the discussion on the relationship between tacit collusion and mere parallel behaviour at Ch. 2.

theoretical paradigms which draw up the relevant models, while the legal analysis is concerned with a given market situation in real circumstances.

(E) CONCLUSION

Economic theory constitutes a highly influencing parameter on the formulation of the legal concept of collective dominance in mergers.

The two main economic theories of oligopolistic interaction are constituted by the static and dynamic oligopoly models. On the one hand, the static oligopoly models are single period non-cooperative games that are not considered appropriate for the assessment of collective dominance, because in the absence of repeated interaction retaliation does not take place which means that cheating is always the individual rational decision and accordingly these models result in near competitive (Cournot) or competitive (Bertrand) prices. On the other hand, the dynamic game theory models provide that a potential outcome of the competitive interaction in oligopolistic markets is tacit collusion that is characterised as a non-cooperative game with infinite repeated interactions and forms the economic foundation of the legal concept of collective dominance in mergers.

Economic theory has set out the necessary requirements for the emergence of tacit collusion and such conditions have been integrated within the legal analysis of collective dominance under the Merger Regulation in the form of the *Airtours* criteria. Moreover, economic theory provides that the establishment of the necessary conditions for coordination must be assessed on the basis of the relevant structural characteristics which affect the firms' market behaviour. Specifically, in the situation where the largest firms account for high market shares or high concentration indices the concern for coordination is raised, whilst the

reverse holds true in case their combined market shares are negligible and concentration levels are low. The presence of a limited number of competitors facilitates the adoption of a common coordinated policy and its sustainability, while numerous firms reduce the likelihood to implement and sustain a collusive equilibrium. Symmetries between the largest firms increase their incentives to coordinate and to stabilise a collusive understanding, whereas asymmetries make collusion difficult to achieve and to sustain. Product homogeneity facilitates the adoption of a common coordinated policy and its stability, in contrast to product differentiation which generates difficulties in attaining and sustaining collusion. A stable or moderately growing demand increases the incentives to stabilise a collusive understanding, whereas high growth or declining markets decrease the ability and the incentives to sustain a coordinated equilibrium. An inelastic demand facilitates the implementation and the sustainability of a collusive understanding, as opposed to a high elasticity of demand which reduces the ability to collude and the incentive to sustain a collusive policy. Highly innovative markets are not conducive to coordination, but on the contrary mature technology markets assist the enforcement of a collusive consensus. The existence of structural links and multimarket contacts heighten the ability as well as the incentives to collude and assist the sustainability of such an outcome. Excess capacity and capacity constraints may facilitate both collusion and deviation and accordingly their effects on coordination depend on whether they affect all or some of the oligopolists. High entry barriers assist the stability of coordination, whereas low entry barriers jeopardise the stability of a collusive policy. The presence of a maverick firm or a strong group of fringe competitors may disrupt a coordinated equilibrium, in contradiction to a merger that absorbs a maverick or the marginal presence of fringe firms which increase the likelihood of sustainable collusion. A strong buyer power may destabilize a collusive understanding, while a weak

buyer side facilitates the stability of a collusive policy. Lastly, past collusive behaviour may facilitate the establishment of collusion in certain circumstances.

Criticism on game theory is directed towards its results and its underlying assumptions. Thus, it has been pointed out that game theoretic models are inconclusive in their predictions, as they produce multiple possible equilibria, and it has been suggested that a very strict framework would be needed to be met before their predictions would be admitted into evidence, which produces complexities on the control of collective dominance under the Merger Regulation. Also, behavioural economics denounce the game theoretic assumption that market participants are rational profit-maximising subjects by focusing on imperfect rationality that leads to results contradictory to the predictions of game theory, but such a theory also presents the weakness of producing multiple possible outcomes. Moreover, experimental economics have illustrated laboratory results which contradict some of the standard insights of game theoretic models, but the validity of such results is questionable due to the employed methodology. Lastly, despite the interface between law and economics in the formulation of the concept of collective dominance, there are also some distinctive features as, in contrast to economics, the legal analysis focuses on the distinction of the type of collusion examined due to evidential issues and emphasises on the underlying reason for potential price increases in order to determine the legality or illegality of conduct.

CHAPTER 4

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POLICY CONSIDERATIONS: DEVELOPMENT AND OBJECTIVES

(A) INTRODUCTION

Policy considerations play an important role in the formulation of competition rules in the EU. The ultimate goal of EU competition policy is contained in the Preamble of the TFEU, which focuses on the objective of ‘fair competition’ within the EU internal market by removing any existing obstacles¹. In accordance with this policy objective, the EU Merger Control system has been introduced since 1989 and it has become a central instrument of EU competition policy².

EU merger policy aims to prevent firms from exercising substantial market power by classifying concentrations into one of two groups: they are either compatible with the Common Market as long as they do not overly restrain competition or they are incompatible with the Common Market if they threaten to significantly impede the maintenance of effective competition³. In the assessment of collective dominance cases the primary target of

¹ Consolidated Version Of The Treaty On The Functioning Of The European Union ([2010], OJ C/83/47 [2010], available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:083:0047:0200:en:PDF>).

² A. Christiansen, The ‘More Economic Approach’ In EU Merger Control – A Critical Assessment, 2006, available at http://www.dbresearch.com/PROD/DBR_INTERNET_DE-PROD/PROD000000000196093.PDF, 1-26, p. 2.

³ G. Zekos, The New E.U. Approach To Mergers And Market Integration, E.C.L.R., 2000, 21(1), 37-44, p. 40, J. Vickers, Competition Economics And Policy, E.C.L.R., 2003, 24(3), 95-102, p. 101, Communication From The

EU merger policy is to ensure that companies compete rather than collude and as a policy concern concentrations that pose a serious risk of leading to collusion are prohibited.

This Chapter focuses on the development of policy considerations and their objectives in collective dominance under the Merger Regulation. Section B focuses on the schools of economic thought which have formed the foundation of policy considerations in collective dominance. Moreover, it highlights the development of policy considerations that have affected the evolution of collective dominance in its various Phases as classified by the corresponding change of analysis. Section C examines the policy objective that focuses on the regulation of collective dominance in mergers so as to preserve effective competition and protect the consumers' welfare. Also, it considers the emphasis attributed on price and non-price effects in the assessment of the potential detrimental impact of concentrations examined for collective dominance. Furthermore, it evaluates whether non-competition policy objectives are considered in the analysis of collective dominance merger cases. Finally, Section D sums up the position on the development and objectives of policy considerations in collective dominance under the Merger Regulation.

Commission, A Pro-Active Competition Policy For A Competitive Europe, 2004, COM (2004) 293 Final, available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2004:0293:FIN:EN:PDF>, 1-20, p. 6, D. Gerber, Modernising European Competition Law: A Developmental Perspective, E.C.L.R., 2001, 22(4), 122-130, p. 124, S. Voigt and A. Schmidt, Switching To Substantial Impediments Of Competition (SIC) Can Have Substantial Costs - SIC!, E.C.L.R., 2004, 25(9), 584-590, p. 584, M. Wise, Competition Law And Policy In Finland, OECD Journal Of Competition Law And Policy, 2005, 6(4), available at http://www.keepeek.com/Digital-Asset-Management/oecd/governance/competition-law-and-policy-in-finland_clp-v6-art9-en, 1-67, p. 17 and B. Lyons, *Cases In European Competition Policy – The Economic Analysis*, Cambridge, First Edition, 2009, p. 14.

(B) POLICY DEVELOPMENT

(1) Schools Of Thought

Various schools of economic thought have formed the basis of policy considerations in collective dominance, from the initial steps of the introduction of such a concept up to its recent evolution. In particular, such policy considerations have been founded on the ideas of the ordoliberalists, the Harvard and Chicago schools of thought as well as the new industrial organisation theorists.

Ordoliberalism viewed competition as a process driven by rivalry between firms, based on the idea that such rivalry would eventually lead to vigorous competition and aimed to control entrenched market power in order to protect the economic freedom of rival undertakings to compete⁴. Accordingly, the Ordoliberalists' focus was shed on guaranteeing the maintenance of a minimum number of competitors in the market, where none of them would have any significant market power, in order to preserve a certain degree of rivalry and prevent the coercion of smaller market participants⁵. Also, the Ordoliberalists' views supported the notion that the state must protect the process of competition from distortion and

⁴ D. Hildebrand, *The Role of Economic Analysis In The EC Competition Rules*, Kluwer, Second Edition, 2002, pp. 160-161, I. Lianos, Some Reflections On The Question Of The Goals Of EU Competition Law, CLES Working Paper Series 3/2013, 2013, available at <http://www.ucl.ac.uk/cles/research-paper-series/research-papers/cles-3-2013#>, 1-64, pp. 24-26, A. Weitbrecht, From Freiburg To Chicago And Beyond - The First 50 Years Of European Competition Law, E.C.L.R., 2008, 29(2), 81-88, p. 82 and A. Pera and V. Auricchio, Consumer Welfare, Standard Of Proof And The Objectives Of Competition Policy, E.C.J., 2005, 1(1), 1-30, p. 9.

⁵ C. Ahlborn and C. Grave, Walter Eucken And Ordoliberalism: An Introduction From A Consumer Welfare Perspective, C.P.I., 2006, 2(2), 197-217, p. 212 and S. Eibl and J. Schultze, From Freiburg To Brussels And Back Again? The Seventh Revision Of Germany's Competition Law, E.C.L.R., 2005, 26(9), 526-531, p. 531.

intervene in markets that are characterised by imperfect competition, i.e. they proposed limited yet powerful government intervention⁶.

The Harvard school ideas were based on the belief that competition was the key to economic progress and viewed firms with large market power as threats to the competitive process due to their ability to limit smaller dealers' freedom to compete⁷. Also, the Harvard school claimed that the aim of competition is good performance in a particular market so as to increase general material welfare, without concentrating solely on consumer welfare, whilst the unfair outcomes of market processes should be corrected by governmental intervention. Moreover, it purported that workable competition could be defined by structure, conduct and performance norms, i.e. the 'SCP paradigm', but also that there existed a causal link between these factors, since the structure of a given market determined the conduct of firms and conduct in turn influenced performance⁸. This approach focused primarily on the

⁶ D. Hildebrand, above note 4, pp. 159-160 and 162 and P. Nedergaard, *The Influence Of Ordoliberalism In European Integration Processes*, 2013, available at mpra.ub.uni-muenchen.de/52331/1/MPRA_paper_52331.pdf, 1-32, pp. 5-6.

⁷ W. Kovacic and C. Shapiro, *Antitrust Policy: A Century Of Economic And Legal Thinking*, *Journal Of Economic Perspectives*, 2000, 14(1), available at <http://faculty.haas.berkeley.edu/shapiro/century.pdf>, 43-60, p. 49, B. Orbach, *How Antitrust Lost Its Goal*, *Fordham Law Review*, 2013, 81, available at <http://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=4883&context=flr>, 2253-2277, p. 2269, J. Baker, *A Preface To Post-Chicago Antitrust*, 2001, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=296119, 1-24, pp. 8-9 and W. Page, *The Ideological Origins And Evolution Of US Antitrust Law*, *Issues In Competition Law And Policy*, 2009, 1, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=692821, 1-17, p. 17.

⁸ C. Ahlborn and C. Grave, above note 5, p. 214, L. Gormsen, *The Parallels Between The Harvard Structural School And Article 82 EC And The Divergences Between The Chicago And Post-Chicago Schools And Article 82*, *E.C.J.*, 2008, 4(1), 221-241, pp. 222-223 and D. Evans and C. Grave, *The Changing Role Of Economics In*

structural limb of the paradigm by giving particular emphasis on concentration levels and entry barriers, which were believed to facilitate anticompetitive behaviour and eventually poor performance, while efficiency claims were considered irrelevant and possibly a factor weighing against the approval of mergers⁹. Overall, these views were based on ideas favourable to deconcentration and produced an aggressive merger policy in the US.

The Chicago school arose as a reaction to the extreme level of enforcement that occurred during the prevalence of the Harvard School, as it detested comprehensive regulation and emphasized on efficiency explanations¹⁰. Specifically, on the one hand the Chicago school rejected the previous approach which was based on trader freedom/competitor protection and purported that the maximisation of efficiencies directed towards the consumers' welfare, which operationalised as aggregate consumer surplus, was the only legitimate goal of competition policy thereby proposing the assessment of business practices on the exclusive basis of their effects on efficiency¹¹. On the other hand, the

Competition Policy Decisions By The European Commission During The Monti Years, C.P.I., 2005, 1(1), 133-154, pp. 148-149.

⁹ M. Oinonen, *Does EU Merger Control Discriminate Against Small Market Companies?: Diagnosing The Argument With Conclusions*, Kluwer, First Edition, 2010, pp. 43-45 and 47, W. Kovacic and C. Shapiro, above note 7, p. 51 and J. Vickers, above note 3, p. 96.

¹⁰ W. Kovacic and C. Shapiro, above note 7, pp. 52-54, B. Kobayashi and T. Muris, *Chicago, Post-Chicago And Beyond: Time To Let Go Of The 20th Century*, 2012, available at http://www.law.gmu.edu/assets/files/publications/working_papers/1231ChicagoPostChicago.pdf, 1-28, p. 23 and F. Scherer, *Some Principles For Post-Chicago Antitrust Analysis*, *Case Western Reserve Law Review*, 2001-2002, 52, 5-23, p. 8.

¹¹ W. Page, above note 7, pp. 10 and 12, E. Fox, *We Protect Competition, You Protect Competitors*, *World Competition*, 2003, 26(2), 149-165, pp. 152-153, B. Kobayashi and T. Muris, above note 10, p. 2, M. Oinonen, above note 9, p. 50, I. Lianos, above note 4, p. 2, J. Galloway, *The Pursuit Of National Champions: The*

Chicago school relied on the self-correcting nature of markets and it opposed governmental intervention, unless market conduct was provably inefficient¹². Therefore, these views led to the development of a more permissive climate for mergers.

Lastly, the new industrial organisation theorists, i.e. the post-Chicago school, identified exceptions and qualified some of the conclusions of the Chicago scholars by adopting a less ideological and more technical approach to problems that was based on a more sophisticated form of analysis in order to assess the firms' incentives, their likely conduct and effects on the market¹³. Specifically, the industrial organisation theorists analysed models of game theory in order to identify the necessary conditions for the establishment of successful collusion in oligopolies and rejected the static SCP paradigm that advanced a simple causal relationship between structure, behaviour and performance in favour of a more sophisticated SCP framework which emphasised on conduct and its dynamic interaction with market structure, while they also focused on the evaluation of the potential loss of R&D competition and pointed out the importance of dynamic efficiencies¹⁴. These developments pointed towards a more interventionist direction than the Chicago school

Intersection Of Competition Law And Industrial Policy, E.C.L.R., 2007, 28(3), 172-186, p. 173, A. Weitbrecht, above note 4, p. 85 and L. Gormsen, above note 8, p. 228.

¹² E. Fox, above note 11, p. 153, W. Page, above note 7, p. 2 and D. Hildebrand, The European School In EC Competition Law, *World Competition*, 2002, 25(1), 3-23, p. 4.

¹³ J. Baker, above note 7, pp. 19 and 24, W. Page, above note 7, p. 17, B. Kobayashi and T. Muris, above note 10, pp. 3 and 15 and R. Pierce, Is Post-Chicago Economics Ready For The Courtroom?, A Response To Professor Brennan, *The George Washington Law Review*, 2000-2001, 1103-1125, p. 1108.

¹⁴ M. Oinonen, above note 9, pp. 65, 70-71 and 73, D. Hildebrand, above note 4, p. 153, H. Haupt, Collective Dominance Under Article 82 E.C. And E.C. Merger Control In The Light Of The *Airtours* Judgment, E.C.L.R., 2002, 23(9), 434-444, p. 436 and C. Ahlborn and C. Grave, above note 5, p. 214.

dictations, even though such a position was more lenient in relation to the Harvard school era, i.e. the post-Chicago school did not suggest a return to the interventionist doctrines of the Harvard school, and required the concept of consumer welfare to reflect the actual economic position of consumers instead of total economic efficiency¹⁵.

(2) The Three Phases Of Policy Development

The policy development in collective dominance under the Merger Regulation can be distinguished in three Phases. Phase I concerns the period from *Nestle/Perrier* until *France v. Commission (Kali and Salz)* (1992-1994) that set the foundation of collective dominance in mergers and a static analysis of structural factors was adopted. Phase II refers to the period between *Gencor/Lonrho* up to *Airtours* (1997-2002) which was characterised by policy modifications and evolution related to the move towards a more-economic and effects-based approach that examined in a dynamic fashion both structural factors as well as the firms' behaviour. Phase III examines the period from the introduction of the Merger Regulation 139/2004 up to the decision in *ABF/GBI* (2004-2009) where the previous policy developments were cemented and further qualified.

(3) Phase I – From *Nestle/Perrier* To *France v. Commission*

(1) The Introduction Of Collective Dominance In EU Merger Control

In 1989 the first Merger Regulation was introduced and formed the basis for the assessment of concentrations in the EU. Articles 2(2) and (3) of the Merger Regulation 4064/89 contained the substantive test, which employed a 'dominance' standard for the appraisal of concentrations and this was in accordance with the ordoliberalists' ideas, as it

¹⁵ J. Baker, above note 7, p. 22 and S. Waller and J. Woods, *Antitrust Transitions*, World Competition, 2009, 32(2), 189-198, p. 194.

prevented the emergence of significant market power in order to preserve market rivalry¹⁶. Even though the Merger Regulation 4064/89 embodied no express provisions for the control of collective dominant positions, the consideration that EU Merger Control would be weakened if it were confined only to the examination of cases concerning single firm dominance led the Commission and the Courts to stretch the concept of dominance so as to accommodate the theory of collective dominance and this was accomplished by applying the substantive test in a teleological manner¹⁷.

This policy development was firstly established in *Nestle/Perrier*, where the Commission laid down the legal basis for the assessment of collective dominance within the boundaries of the Merger Regulation 4064/89¹⁸. Nonetheless, after that case uncertainties remained over the precise scope of the Merger Regulation. Thus, the issue was finally settled in *France v. Commission*, where the ECJ held that, even though the Merger Regulation 4064/89 did not expressly refer to the concept of collective dominance, it should be interpreted widely with reference to its general purpose and structure in order to avoid distortions in the Common Market and accordingly the Court confirmed that the control of collective dominant positions fell within the boundaries of its provisions¹⁹.

¹⁶ D. Gerber, *Law And Competition In Twentieth Century Europe, Protecting Prometheus*, Oxford, First Edition, 1998, p. 331.

¹⁷ B. Lyons, above note 3, p. 349.

¹⁸ *Nestle/Perrier* (Case IV/M.190 [1992], OJ L356/1 [1992], 4 CMLR M17 [1993]) paras 110-116. See also, I. Kokkoris, The Development Of The Concept Of Collective Dominance In The ECMR – From Its Inception To Its Current Status, *World Competition*, 2007, 30(3), 419-448, p. 425.

¹⁹ *France v. Commission* paras 165-171. See also, V. Korah, *Gencor v. Commission: Collective Dominance*, E.C.L.R., 1999, 20(6), 337-341, p. 337, M. Motta, E.C. Merger Policy And The *Airtours* Case, E.C.L.R., 2000,

(II) The Influence Of Article 102 Collective Dominance

In Phase I the theoretical foundation of collective dominance in concentrations was formed by drawing parallels and transferring the definition of collective dominance from Article 102 precedents to the framework of merger assessment, since the reference to the concept of ‘dominance’ in the Merger Regulation 4064/89 created a considerable overlap between Article 102 decisions and merger cases²⁰. Therefore, the Commission assessed the potential collusive effects of concentrations in oligopolies on the basis of the notion of a dominant position held by ‘more undertakings’ derived from Article 102 and as was established within that context by the GC in *Italian Flat Glass*²¹.

In the examination of Article 102 abuse of collective dominance cases the Commission and the Courts focused on whether a connecting factor existed between the undertakings that led them to present themselves or act as a collective entity on the market, since it was particularly such a connection which conferred upon them the ability to jointly

21(4), 199-207, pp. 199 and 204 and V. Rabassa and P. Christensen, *The Airtours Decision: Is There A New Commission Approach To Collective Dominance?*, E.C.L.R., 2001, 22(6), 227-237, p. 227.

²⁰ S. Stephanou, *Collective Dominance Through Tacit Coordination: The Case For Non-Coordination Between Article 82 And Merger Control ‘Collective Dominance’ Concepts*, C.P.I., 2009, October, 1-8, p. 4.

²¹ *Societa Italiana Vetro v. Commission (Italian Flat Glass)* (Cases T-68, 77 and 78/89 [1992], ECR II-1403 [1992], 5 CMLR 302 [1992]) paras 357-358. See also, L. Vitzilaoui and C. Lambadarios, *The Slippery Slope Of Addressing Collective Dominance Under Article 82 EC*, C.P.I., 2009, October, 1-10, p. 2 and D. Evans and C. Grave, above note 8, p. 141.

exercise market power²². Thus, in *Italian Flat Glass* the GC emphasised that the structure of the market did not solely determine the establishment of a collective dominant position and accordingly a certain relationship had to exist between the undertakings in the form of economic links²³. This was confirmed by the ECJ in *Almelo v. Energiebedrijf Ijsselmij*, the Commission in *Transatlantic Conference Agreement* and the GC in *Compagnie Maritime Belge v. Commission* where it was held that a collective dominant position could be established only if there were structural or economic links between the undertakings²⁴.

This reliance on links was directly integrated in collective dominance merger cases. Specifically, in *Kali and Salz* the Commission held that the merger would create a collective dominant position by principally relying on the existence of structural links between the oligopolists²⁵. Also, the necessity of links was underlined in *France v. Commission* where the ECJ held that ‘correlative factors’ and other economic links were essential in establishing collective dominance under the Merger Regulation²⁶. Hence, structural or economic links were considered as a necessary factor for the establishment of collective dominance under the

²² Note also the discussion on links and the collective entity requirement in the analysis of collective dominance under Article 102 at Ch. 6. See also, C. Gordon and R. Richardson, *Collective Dominance: The Third Way?*, E.C.L.R., 2001, 22(10), 416-423, pp. 420 and 422.

²³ *Italian Flat Glass* para. 358. See also, M. Jephcott and C. Withers, *Where To Go Now For E.C. Oligopoly Control?*, E.C.L.R., 2001, 22(8), 295-303, p. 297.

²⁴ *Almelo and Others v. Energiebedrijf Ijsselmij* (Case C-393/92 [1994], ECR I-1477 [1994]) para. 42, *Transatlantic Conference Agreement (TACA I)* (Case IV/35.134 [1998], OJ L95/1 [1999], 4 CMLR 1415 [1999]) paras 521 and 525 and *Compagnie Maritime Belge v. Commission* (Cases T-24-26/93 and 28/93 [1996], ECR II-1201 [1996], 4 CMLR 273 [1997]) para. 62.

²⁵ *Kali and Salz* paras 57-61.

²⁶ *France v. Commission* para. 221. See also, D. Evans and C. Grave, above note 8, p. 142, I. Kokkoris, above note 18, p. 425 and M. Motta, above note 19, p. 204.

Merger Regulation, since it was assumed that the oligopolists had to be linked in a concrete way in order to be able to adopt a common policy in the relevant market post-merger²⁷.

(III) The Structural (Static) Analysis

In Phase I the analysis of collective dominance in mergers was influenced by policy considerations that were founded on the ideas of the Harvard school. Thus, in accordance with the Harvardian approach, the Commission and the Courts emphasised on the identification of those structural elements that facilitated collusion. Specifically, a static SCP analytical framework was employed that narrowly focused on a ‘checklist approach’ of simplistic analysis related to the presence or absence of structural factors typical of markets prone to collusion, i.e. market shares and a long list of additional factors. On the contrary, the dynamic elements of competition were consistently not taken into account, while no clear-cut economic theory was presented as the foundation of the collective dominance analysis and such an approach was evident from the fact that the requirement of structural or economic links was based on legal as opposed to economic considerations²⁸.

The focus on a static analysis of a ‘checklist’ of structural factors is clearly illustrated by the relevant decisions in Phase I. Specifically, in *Nestle/Perrier* the Commission centred its analysis of collective dominance on numerous structural factors, such as the fact that the post-merger market would be characterised by a duopoly with high market shares, high

²⁷ A. Nikpay and F. Houwen, Case Comment - Tour De Force Or A Little Local Turbulence? A Heretical View On The *Airtours* Judgment, E.C.L.R., 2003, 24(5), 193-202, p. 197.

²⁸ E. Kloosterhuis, Joint Dominance And The Interaction Between Firms, E.C.L.R., 2001, 22(3), 79-92, pp. 86-87.

homogeneity of products and high entry barriers²⁹. On the contrary, the Commission did not consider in detail dynamic factors, such as the ability to effectively punish deviations and whether the collusive incentives would be sustainable over time, even though considerations relating to retaliation as such did enter the competitive assessment, but their examination was short, purely theoretical and without granting them any particular weight³⁰. Moreover, in *Kali and Salz* the Commission again relied on a static analysis of market characteristics, such as the high combined market shares between the largest market participants and the existence of links between the oligopolists³¹. Conversely, once more the Commission did not emphasise on dynamic considerations in its analysis. In contrast to the Commission, the ECJ in *France v. Commission* shed an increased focus on the dynamic elements of competition, since it analysed the firms' deviation incentives as well as the ability and the incentives of fringe competitors to exercise countervailing power, but again not at any high level of sophistication and without outlining any particular theory of harm as the foundation of collective dominance³².

The application of a checklist approach allowed for an interventionist stance towards mergers assessed for collective dominance, which was in accordance with the Harvard school's basic beliefs that directed towards an increased level of enforcement. In particular, the Commission could establish collective dominance simply by illustrating the presence of a large number of structural factors pointing towards such a conclusion, despite the existence of one (or more) adverse factors and without focusing on the interaction between those factors

²⁹ *Nestle/Perrier* paras 119, 120 and 130.

³⁰ *Nestle/Perrier* paras 122-123.

³¹ *Kali and Salz* paras 52 and 57-61. See also, G. Zekos, above note 3, pp. 43-44.

³² *France v. Commission* paras 234-239 and 242-248. See also, S. Voigt and A. Schmidt, *Making European Merger Policy More Predictable*, Springer, First Edition, 2005, p. 150.

and the firms' foreseeable conduct. Also, the objective of the Commission was centred on the protection of the market participants' freedom in the competitive process, as its aim was to maintain diversified markets with as many players as possible and no dominant competitor. Lastly, efficiencies claims were not recognised as a defence to problematic mergers.

(4) Phase II – From *Gencor/Lonrho* To *Airtours*

(I) Dynamic Analysis: Focus On Behaviour And The Effects-Based Approach

Phase II signalled a noticeable policy change that resulted to the significant evolution in the assessment of collective dominance. Specifically, the Courts implemented the ideas of the industrial organisation theorists, which led to the application of a dynamic analysis and the abandonment of the old static analysis. This dynamic analysis concerned the factors considered in a collective dominance merger assessment, where the Courts examined the interaction between the post-merger market structure and the firms' behaviour, but also the concept of restriction to competition where the Courts adopted an effects-based approach.

A core feature of the collective dominance analysis in Phase II was the increased focus on the behaviour of the firms in the relevant market post-merger. Specifically, the Courts departed from the static analysis of structural characteristics towards a dynamic analysis that emphasised on structural but also behavioural factors. This was made crystal clear in *Airtours* where the GC indicated that it will not accept a static analysis that ignores dynamic considerations, since the exclusive focus on the examination of structural factors was not sufficient to make a thorough evaluation of the circumstances leading to collective dominance³³. Accordingly, the GC applied a dynamic SCP model in the context of repeated

³³ *Airtours* para. 192. See also, D. Neven and M. De La Mano, Economics At DG Competition 2008-2009, 2009, available at http://ec.europa.eu/dgs/competition/economist/econ2008_2009.pdf, 317-347, p. 325.

game theory and assessed not only the structural characteristics which were seen as favourable for a tacit collusive outcome, but also it gave central consideration to conduct-related criteria such as cheating incentives.

In the context of a dynamic analysis, an effects-based approach to mergers was adopted and particularly in *Airtours* the GC focused on the impact of the concentration to effective competition³⁴. Thus, while in Phase I no consideration was attributed to competitive effects, the Phase II adoption of an effects-based approach led to the assessment of the underlying economic rationale of the merger. Such an approach is advocated by economists and to that extent it is related to and forms part of the more economic approach, while it is inextricably linked to a consumer welfare standard³⁵.

The Behavioural Aspects: Rationality, Incentives, Anticipation And Alignment

The increased focus on the firms' conduct forms the foundation of the new approach in the analysis of collective dominance and it is in accordance with the principles set out in the economic theory of tacit collusion³⁶. Specifically, the emphasis is on the foreseeable conduct of firms in order to discern whether collusion is likely. The behaviour of the firms is assessed in terms of the rationality of their market conduct, their incentives to act on a given

³⁴ *Airtours* para. 63.

³⁵ For example, Commissioner Kroes explained that 'an effects-based approach, grounded in solid economics, ensures that citizens enjoy the benefits of a competitive, dynamic market economy'. See also N. Kroes, European Competition Policy: Delivering Better Markets And Better Choices, Presentation At European Consumer And Competition Day, 2005, available at <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/05/512&format=HTML&aged=0&language=en&guiLanguage=en>, 1-6, p. 2 and D. Evans and C. Grave, above note 8, p. 152.

³⁶ E. Kloosterhuis, above note 28, pp. 81 and 90.

market structure, the anticipation of each other's behaviour and the alignment of their conduct in the market. Such an approach was fully implemented in *Airtours* where the GC assessed the rationality and the incentives of the oligopolists to reach a common policy of coordination by aligning their market conduct, but primarily it focused on the stability of the collusive outcome overtime by appraising the incentives of each firm to deviate from the common policy as opposed to the incentives to abide by such a collusive strategy³⁷.

The analysis of the rationality of conduct relates to both the adoption of a common collusive policy and its sustainability. Thus, the Commission and the Courts examine whether it would be economically rational for the firms to adopt a common policy of coordination post-merger³⁸. Also, the sustainability of coordination depends on whether the oligopolists would find deviation less profitable than collusion, as in those circumstances the rational choice would be for the firms to stick to the collusive equilibrium³⁹. The rationality of the firms' behaviour is determined by the prevailing structural conditions in the relevant market post-merger. Therefore, in *Gencor* the GC held that having regard to the relevant market structure 'anticompetitive parallel conduct would, economically, have constituted a more rational strategy than competing with each other'⁴⁰. Furthermore, in *Airtours/First Choice* the Commission held that in the particular circumstances of the market it would be 'rational for the three major players to avoid or reduce competition between them'⁴¹.

³⁷ *Airtours* paras 61-62.

³⁸ *Airtours* para. 61.

³⁹ *Airtours* para. 62. See also, E. Kloosterhuis, above note 28, p. 85 and F. Mezzanotte, Direct Versus Indirect Proof Of The *Airtours* Criterion In *Impala*, World Competition, 2008, 31(4), 523-540, p. 529.

⁴⁰ *Gencor* para. 236.

⁴¹ *Airtours/First Choice* para. 56.

The analysis of rationality of conduct is aimed at the identification of the oligopolists' incentives which in turn determine whether the alignment of their behaviour is likely post-merger. Specifically, in order to appraise the likelihood of collective dominance post-merger the Commission and the Courts must identify the firms' incentives and assess their tendency to collude by forming a tacit consensus of coordination and by sustaining such an outcome or their tendency to compete⁴². The structural features of the relevant market influence the firms' collusive incentives and consequently the focus of the analysis is on whether the change in the market structure following the merger increases or decreases such incentives⁴³. Thus, in *Gencor/Lonrho* the Commission's prohibition decision was based on the fact that because of structural changes post-merger, such as the removal of a fierce fringe competitor and the increase in symmetries among the oligopolists, there would be no incentives between the remaining market participants to compete against each other⁴⁴. Also, in *Airtours/First Choice* the Commission held that the presence of a punishment mechanism would increase the firms' collusive incentives⁴⁵.

The anticipation of the rivals' conduct in an oligopoly assists the adoption of a common collusive policy, since it facilitates the alignment of their market behaviour, and is dependent on the structural characteristics of the relevant market. This was made clear in *Gencor* and was confirmed in *Airtours*, as the GC held that, where the market in question has

⁴² *Airtours* paras 61-62.

⁴³ D. Neven and M. De La Mano, above note 33, p. 326 and F. Maier-Rigaud and K. Parplies, EU Merger Control Five Years After The Introduction Of The SIEC Test: What Explains The Drop In Enforcement Activity?, E.C.L.R., 2009, 30(11), 565-579, p. 571.

⁴⁴ *Gencor/Lonrho* paras 190 and 205.

⁴⁵ *Airtours/First Choice* para. 55.

the appropriate characteristics, the competitors are in a position to anticipate one another's behaviour and eventually align their conduct⁴⁶.

(II) The More Economic Approach

The Phase II alignment of policy considerations to the ideas of the industrial organisation theorists led the analysis of collective dominance to be heavily based on economic theory. Specifically, from the initial steps of Phase II, but particularly in *Airtours*, the GC adopted a more economic approach in the assessment of collective dominance in mergers. Nevertheless, the application of an economic analysis in itself was not a wholly novel concept, as it was a feature of the examination of mergers since the early stages of the collective dominance assessment and the Commission had always relied to some extent on economics in order to evaluate the compatibility of concentrations with the Common Market⁴⁷. Thus, what constituted this new era of assessment was the increased use of economic models as a basis for the examination of mergers for collective dominance and the adoption of a more economic approach to the concept of restriction of competition⁴⁸.

The adoption of a more economic approach is evident by the fact that the economic theory of tacit collusion was integrated in the Courts' decisions as the foundation of the

⁴⁶ *Gencor* para. 276 and *Airtours* para. 60. See also, E. Kloosterhuis, above note 28, p. 80 and M. Motta, above note 19, p. 204.

⁴⁷ L. Roller, Economic Analysis And Competition Policy Enforcement In Europe, In: *Modelling European Mergers: Theory, Competition And Case Studies*, Elgar, First Edition, 2005, 13-26, p. 13 and D. Evans and C. Grave, above note 8, p. 136.

⁴⁸ A. Christiansen, above note 2, p. 2.

collective dominance analysis⁴⁹. Therefore, in *Gencor* the GC clarified that the focus of the collective dominance analysis should be on whether the concentration would increase the feasibility of tacit collusion post-merger⁵⁰. In particular, the GC held that when certain market circumstances are present, the oligopolists may recognise their interdependence and align their market conduct, without entering into an agreement or resorting to a concerted practice, while the Court also highlighted the colluding firms' retaliatory reaction in the situation where a deviation occurs, i.e. a dictum which mirrors the theory of tacit collusion as developed in economics⁵¹. The *Airtours* judgment advanced the *Gencor* ruling, by bringing collective dominance explicitly into line with the theory of tacit collusion⁵². Specifically, the GC structured the framework for the analysis of collective dominance by placing tacit collusion at its centre and specified in accordance with economic dictations the necessary conditions for its establishment, i.e. the *Airtours* criteria⁵³. These conditions point directly

⁴⁹ Note also the discussion that tacit collusion forms the foundation of the collective dominance analysis in mergers at Ch. 2.

⁵⁰ K. Kuhn and C. Caffarra, Joint Dominance: The CFI Judgment On *Gencor/Lonrho*, E.C.L.R., 1999, 20(7), 355-359, p. 356 and I. Kokkoris, above note 18, pp. 422-423 and 425.

⁵¹ *Gencor* paras 276-277. Note also the discussion on the economic characteristics of tacit collusion at Ch. 3. See also, A. Nikpay and F. Houwen, above note 27, pp. 197-198, D. Evans and C. Grave, above note 8, p. 142 and S. Baxter and F. Dethmers, Collective Dominance Under EC Merger Control - After *Airtours* And The Introduction Of Unilateral Effects Is There Still A Future For Collective Dominance?, E.C.L.R., 2006, 27(3), 148-160, p. 149.

⁵² *Airtours* paras 59-62. See also, B. Lyons, above note 3, p. 350.

⁵³ Note also the discussion on the *Airtours* criteria at Ch. 2. See also, A. Amelio, P. Asbo, M. De La Mano, R. Maximiano and V. Porubsky, *ABF/GBI Business: Coordinated Effects Baked Again*, 2009, available at http://ec.europa.eu/competition/publications/cpn/2009_1_22.pdf, 1-8, p. 3 and F. Mezzanotte, above note 39, p. 530.

towards more economically founded decisions, because they are in accordance with the criteria which industrial economics set out as leading to a tacitly collusive equilibrium⁵⁴.

The change of policy towards a more economic approach was highly influenced by the fact that the GC overturned the Commission's *Airtours/First Choice* prohibition decision due to insufficient economic analysis and heavily criticised its inadequate interpretation of economic theory and the absence of economic evidence substantiating its conclusions⁵⁵. Essentially, the GC's criticism was directed at the standard of proof upon which the Commission's decision was based, as it implicitly recognised a low level of intervention and introduced a stricter threshold to be met. Thus, the judgment marked a departure from the way the standard of proof had been applied in previous cases by increasing such a threshold through the cumulative nature of the *Airtours* conditions, as the Commission could no longer prove its case by simply employing a checklist and arguing that the factors which indicate a collective dominant position post-merger outweighed the factors pointing against such an outcome. This criticism made a huge impact on merger appraisal, since it formed one of the

⁵⁴ Note also the discussion on the implementation of the necessary conditions for a tacit collusive outcome as prescribed in economic theory to the legal concept of collective dominance at Ch. 3. See also, D. Evans and C. Grave, above note 8, p. 144.

⁵⁵ Note also the discussion on the GC's criticism against the Commission's *Airtours/First Choice* decision at Ch. 8. See also, L. McGowan, Reinforcing Europeanization: Assessing The Significance And Impact Of The Recast Merger Control Regulation, Queen's Papers On Europeanization 03/07, 2007, available at <http://www.qub.ac.uk/schools/SchoolofPoliticsInternationalStudiesandPhilosophy/FileStore/EuropeanisationFiles/Fileupload,87349,en.pdf>, 1-19, pp. 4-5, C. Stevenson and I. Filippi, How Does The European Commission's New Chief Economist Think?, E.C.L.R., 2004, 25(2), 122-125, p. 122, L. Roller, above note 47, p. 15, A. Felice, EU Merger Policy: The Substantive Test, 2007, available at <http://www.albertodifelice.com/essays/mergers.php>, 1-5, p. 5 and A. Overd, After The *Airtours* Appeal, E.C.L.R., 2002, 23(8), 375-377, p. 376.

driving forces behind the reform of the Merger Regulation, whilst post-*Airtours* the Commission's assessment was altered and in particular it was characterised by a heavy reliance on industrial organisation models of game theory and a heightened focus on the soundness of economic analysis in order to ensure that merger investigations were firmly grounded on economic reasoning⁵⁶. Also, the imposition of a demanding threshold of proof in collective dominance merger cases led to a less interventionist stance post-*Airtours* as the level of enforcement declined. Even though such a development was in principle compatible with the move from the Harvard influenced era towards the less interventionist industrial organisation theorists era, it led to an increased reluctance by the Commission to challenge mergers based on the concept of collective dominance. Lastly, the introduction of a more economic approach led to the recognition that the objective of EU Merger Control in collective dominance cases is the enhancement of consumer welfare, because such an approach focuses on evidence related to effects on consumer harm.

(III) Links

In Phase II there was a change of approach on the issue of links, as the emphasis attributed on such a factor was diminished and this was in accordance with the abandonment of the purely structural analysis. Specifically, in *Gencor* the GC held that structural links between the oligopolists were not a necessary requirement in order to reach a collective dominance finding, but some form of a connecting factor deriving from the oligopolistic nature of the market, i.e. oligopolistic interdependence, was in itself sufficient⁵⁷. Hence,

⁵⁶ D. Evans and C. Grave, above note 8, pp. 133 and 143.

⁵⁷ *Gencor* paras 273, 276 and 277. See also, E. Kloosterhuis, above note 28, p. 79, K. Kuhn and C. Caffarra, above note 50, pp. 355-356, M. Jephcott and C. Withers, above note 23, pp. 298 and 302, V. Korah, above note

structural or economic links are to be taken into consideration next to other structural circumstances, because if they are present they may increase the likelihood of collusive behaviour, but the Courts do not attach any particular weight on them or confer a specific requirement for the establishment of such a factor⁵⁸.

(5) Phase III – From The Merger Regulation 139/2004 To *ABF/GBI*

(I) The Merger Regulation And The Horizontal Merger Guidelines

The Merger Regulation 139/2004 adopted the ‘significant impediment to effective competition’ test that confirmed the turn towards a more economic approach, as it signalled a clearer emphasis on economic principles in the assessment of concentrations⁵⁹. Also, the Merger Regulation 139/2004 substantive test directed the Commission and the Courts to perform an effects-based analysis in order to appraise the compatibility of mergers with the Common Market and revealed that the focus of EU Merger Control is on the welfare effects of the merger⁶⁰.

19, pp. 338, 339 and 341, I. Kokkoris, above note 18, pp. 426 and 433 and C. Gordon and R. Richardson, above note 22, pp. 419-420.

⁵⁸ *Danish Crown/Vestjyske Slagterier* (Case IV/M.1313 [1999], OJ L20/1 [2000]) paras 61 and 110. Note also the discussion on links at Ch. 3. See also, V. Rabassa and P. Christensen, above note 19, pp. 232-233.

⁵⁹ B. Lyons, above note 3, pp. 16-17, D. Evans and C. Grave, above note 8, p. 152 and F. Maier-Rigaud and K. Parplies, above note 43, p. 565.

⁶⁰ Note also the discussion on the more economic and effects-based approach adopted under the new substantive test at Ch. 5. See also, D. Evans and C. Grave, above note 8, p. 152, L. McGowan, above note 55, p. 7 and K. Fountoukakos and S. Ryan, A New Substantive Test For EU Merger Control, E.C.L.R., 2005, 26(5), 277-296, pp. 288-289.

The Horizontal Merger Guidelines fully endorsed the more economic approach and this is illustrated by the detailed criteria set out for the assessment of coordinated effects which were directly based on the findings of industrial organisation theorists as well as the confirmation that the focus of the analysis is on the identification of tacit collusion between the oligopolists post-merger⁶¹. Furthermore, the Horizontal Merger Guidelines demonstrated the Commission's intention to take into account both structural factors and conduct related elements in its analysis and implemented the effects-based approach in assessing the prospective impact of concentrations on competition which is apparent by the extensive discussion of the efficiency enhancing effects that may counterbalance the possible anticompetitive impact of a merger⁶². Also, the Horizontal Merger Guidelines adopted an exclusive consumer welfare goal as they directly assert that the purpose of EU Merger Control is to protect and enhance consumer welfare⁶³.

(II) Impala, Sony And ABF/GBI

The *Impala* GC judgment is of great significance from a policy perspective, because of its likely effects on the appraisal of future collective dominance merger cases. Specifically, the judgment upheld the validity of the analysis set out in *Airtours*, since it fully acknowledged the economic model of tacit collusion and the cumulative *Airtours* conditions

⁶¹ A. Christiansen, above note 2, p. 7, A. Amelio et al., above note 53, p. 3, S. Voigt and A. Schmidt, above note 32, p. 113, J. Vickers, *Merger Policy In Europe: Retrospect And Prospect*, 2004, available at http://www.offt.gov.uk/shared_offt/speeches/spe0104.pdf, 1-15, p. 14 and I. Kokkoris, above note 18, p. 444.

⁶² Note also the discussion on the adoption of a more economic and effects-based approach in the Horizontal Merger Guidelines at Ch. 5. See also, K. Fountoukakos and S. Ryan, above note 60, p. 289.

⁶³ Horizontal Merger Guidelines para. 8.

as the theoretical basis for the assessment of collective dominance⁶⁴. Additionally, the GC extended the applicability of the *Airtours* test, as it held that it applies not only to the assessment of the creation of collective dominance, but also to the examination of the strengthening of pre-existing collective dominance⁶⁵. Nonetheless, the crucial turning point of the *Impala* judgment relates to the introduction of the indirect test, which suggested that in the assessment of pre-existing collective dominance the *Airtours* conditions may be established indirectly and it produced three important policy developments⁶⁶. Firstly, the *Impala* test adopts a more flexible approach in the demonstration of pre-existing collective dominance and accordingly it reinforces the Commission's ability to establish such a position, since in that context the fulfilment of the indirect conditions may presume the establishment of the *Airtours* factors⁶⁷. However, such a policy development is somewhat diminished due to the exclusive confinement of the indirect test in the examination of the strengthening of pre-existing collective dominance and its inapplicability in the assessment of the creation of a collective dominant position. Secondly, the indirect test confirms the previous focus on the firms' behaviour along structural indicators. Additionally, the indirect test goes one step forward, since on balance it attributes an even more heightened emphasis

⁶⁴ *Impala* paras 246-247. See also, K. Fountoukakos, Case Note: *Impala v. Commission (Sony/BMG)*, E-Sapience Center For Competition Policy, 2006, available at http://econpapers.repec.org/article/cpiatchrn/11.1.2006_3ai=5030.htm, 1-20, p. 6.

⁶⁵ R. Brandenburger and T. Janssens, The *Impala* Judgment: Does EC Merger Control Need To Be Fixed Or Fine-Tuned?, C.P.I., 2007, 3(1), 301-310, pp. 304-305.

⁶⁶ *Impala* paras 251-252. Note also the discussion on the *Impala* indirect test at Ch. 2. See also, R. Brandenburger and T. Janssens, above note 65, pp. 304-305, F. Mezzanotte, above note 39, p. 525 and S. Volcker and C. O' Daly, Case Comment - The Court Of First Instance's *Impala* Judgment: A Judicial Counter-Reformation In EU Merger Control?, E.C.L.R., 2006, 27(11), 589-596, p. 590.

⁶⁷ Note also the discussion on the 'flexibility' introduced by the indirect test at Ch. 2 and Ch. 8. See also, K. Fountoukakos, above note 64, p. 9 and S. Volcker and C. O' Daly, above note 66, p. 589.

on the firms' conduct as compared to the analysis of the market characteristics⁶⁸. This is illustrated by the fact that all three conditions of the indirect test contain a behavioural element, which validates the greater overall weight attributed to the firms' conduct. In particular, the first condition of the *Impala* test, i.e. 'price alignment', focuses directly on the firms' parallel pricing behaviour, the second condition, i.e. 'other factors indicating dominance', refers to structural factors which influence the oligopolists' collusive incentives, whilst the third condition, i.e. 'absence of another plausible explanation', emphasises on the fact that the cause of the parallelism in question must be solely based on tacit collusive conduct⁶⁹. Thirdly, despite the increased emphasis on the firms' behaviour and the validation of the *Airtours* test which reflect the relevant economic dictations, the indirect test appears to slightly divert from the more economic approach by shifting the focus towards a more 'finely balanced' approach between the legal and economic components of the collective dominance assessment. This is illustrated by the fact that the indirect test focuses directly on the result of the oligopolists' collusive conduct, i.e. parallel pricing above the competitive level held overtime, in order to demonstrate pre-existing collective dominance and it overrides the detailed examination of the *Airtours* economics-based criteria, whilst it is also notable that economics do not provide any valid theory for the indirect establishment of the necessary conditions for coordination along the lines indicated by the *Impala* test. Nevertheless, the indirect test does not abandon the more economic approach as such, but it points towards a more balanced analysis in collective dominance where the tools are economic, since the appraisal is still based on an economic assessment of the relevant market, while the considerations as well as the outcome are purely legal. Overall, the GC in *Impala* introduced the indirect test which qualified the Phase II approach and in particular the *Airtours* test by

⁶⁸ F. Mezzanotte, above note 39, pp. 525 and 538-539.

⁶⁹ *Impala* para. 252.

inserting a more flexible threshold to be met in the examination of the strengthening of collective dominance thereby attempting a reversion towards a more interventionist era in such a context. Also, the GC introduced a more ‘finely balanced’ approach that pointed towards an analysis based on an increased reliance on legal considerations, thereby aiming to overcome the inefficiencies resulting from the inconclusiveness of the game theoretic models, which produce complexities on the effective regulation of collective dominance in mergers.

The ECJ in *Sony* validated the previous policy developments and further advanced the analysis of collective dominance in mergers. On the one hand, the *Sony* judgment upheld the *Airtours* factors as the relevant test in a collective dominance merger assessment and also it confirmed in principle the applicability of the *Impala* indirect test in the analysis of pre-existing collective dominance⁷⁰. Accordingly, the ECJ essentially took a balancing stance between the two policy approaches, i.e. the more ‘demanding’ *Airtours* test and the more ‘lenient’ *Impala* indirect test, in the examination of collective dominance cases. On the other hand, the ECJ qualified the analysis of collective dominance by placing the assessment of the *Airtours* conditions and the *Impala* indirect test in the context of a hypothetical tacit coordination mechanism that shed the focus on how and on which terms coordination could

⁷⁰ *Sony* paras 122-124 and 129. See also, S. Volcker, C. O’Daly and A. Israel, European Court Of Justice Overturns GC’s *Impala* Judgment And Restores Proper Process In EC Merger Review, 2008, available at <http://www.wilmerhale.com/publications/whPubsDetail.aspx?publication=8384>, 1-5, pp. 1 and 4, T. Kaseberg, *Bertelsmann AG And Sony Corporation Of America v. Independent Music Publishers And Labels Association (Impala)*, C.M.L.R., 2009, 46, 255-267, p. 260 and S. Hirsbrunner and C. Kockritz, Rebalancing EC Merger Control: The ECJ’s Judgment In Case C-413/06 (*Bertelsmann And Sony*), G.C.P., 2008, July, 1-20, pp. 14-15.

occur in the circumstances of the case⁷¹. This requirement to set up a mechanism of coordination is in accordance with modern economic thinking and it strengthened the move towards a more economic approach⁷².

From a policy perspective the *ABF/GBI* decision is important to the extent that it is the first example as to how the Merger Regulation 139/2004 substantive standard, together with the *Airtours* test and the ECJ guidance in *Sony* have rearranged the analysis of coordinated effects⁷³. In particular, the Commission fully endorsed the more economic approach by applying the *Airtours* conditions for the establishment of coordination in conjunction with the *Sony* guidance as it set up a hypothetical collusive mechanism and sought to understand how coordination would actually work in practice⁷⁴. Thus, the Commission identified the mechanism and variables on which the firms would tacitly coordinate and then it examined whether the *Airtours* conditions would be fulfilled in such a context⁷⁵. Also, the Commission sought to demonstrate that the merger would significantly impede effective competition by making coordination easier, more stable or more effective and practically employed an effects-based analysis⁷⁶. Therefore, this decision embodies the essence of the policy developments that materialised in Phases II and III with one notable exception, namely that the Commission missed the opportunity to test the waters by pursuing

⁷¹ *Sony* paras 125 and 129. Note also the discussion on the *Sony* requirement of a hypothetical mechanism of coordination at Ch. 2. See also, F. Mezzanotte, above note 39, pp. 524-525 and S. Hirsbrunner and C. Kockritz, above note 70, pp. 5-6.

⁷² T. Kaseberg, above note 70, p. 260.

⁷³ D. Neven and M. De La Mano, above note 33, p. 327.

⁷⁴ *ABF/GBI* paras 141-146. Note also the discussion on the *ABF/GBI* decision at Ch. 2.

⁷⁵ A. Amelio et al., above note 53, pp. 5-6.

⁷⁶ *ABF/GBI* para. 146.

an analysis based on the *Impala* indirect test as it relied on the direct establishment of the *Airtours* criteria.

(C) POLICY OBJECTIVES

The policy goal that underlines the regulation of collective dominance in mergers is constituted by the preservation of effective competition in the relevant market as a means to protect the consumers' welfare. Moreover, in the appraisal of collective dominance cases the Commission and the Courts emphasise on the price effects of a concentration in order to assess its potential adverse impact on effective competition and the consumers' welfare, whilst on the contrary they treat non-price attributes as afterthoughts to the extent that such elements of competition are rarely considered. Lastly, non-competition considerations do not form part of the analysis in collective dominance merger cases and accordingly the focus of the examination centres exclusively on competition related grounds.

(1) Effective Competition As A Means To Protect Consumer Welfare

(I) Preservation Of Effective Competition

EU merger policy aims to preserve competitive market structures by preventing the emergence of markets which are not conducive to effective competition or the deterioration of markets which are already less than effectively competitive⁷⁷. This policy objective has been integrated within the Merger Regulation 139/2004, as the substantive test for the appraisal of concentrations contained in Articles 2(2) and (3) focuses on the likely

⁷⁷ D. Gerber, above note 3, p. 124, M. Monti, EU Competition Policy After May 2004, Fordham Annual Conference On International Antitrust Law And Policy, 2003, available at <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/03/489&format=HTML&aged=1&language=en&guiLanguage=en>, 1-14, p. 5 and K. Fountoukakos and S. Ryan, above note 60, p. 280.

impediment caused by a merger on effective competition⁷⁸. Also, Article 2(1)(a) of the Merger Regulation 139/2004 locates the preservation of competitive market structures at the centre of EU Merger Control by stating that when the Commission makes an appraisal, it must take into account ‘the need to preserve and develop effective competition’⁷⁹. The policy priority of preserving effective competition has been endorsed in the regulation of mergers leading to collective dominance and this was made clear in *Airtours* where the GC held that the degree of effective competition between the oligopolists was a decisive factor in the assessment⁸⁰.

Nevertheless, the preservation of effective competition is an intermediary goal and not an end in itself, since such a policy motive does not exist in a vacuum but it is an instrument designed to achieve a certain policy objective, which takes the form of protecting the consumers’ welfare⁸¹. In particular, there is an integral causal link between these two objectives as essentially the concept of harm to competition implies harm to consumers and

⁷⁸ OECD Country Studies, European Commission – Peer Review Of Competition Law And Policy – Competition Law And Policy In The EU, 2005, available at <http://www.oecd.org/dataoecd/7/41/35908641.pdf>, 1-82, p. 31 and L. McGowan, above note 55, p. 6.

⁷⁹ D. Banks, Non-Competition Factors And Their Future Relevance Under European Merger Law, E.C.L.R., 1997, 18(3), 182-186, p. 182.

⁸⁰ *Airtours* para. 63.

⁸¹ P. Lowe, Preserving And Promoting Competition: A European Response, Competition Policy Newsletter, 2006, available at http://ec.europa.eu/competition/publications/cpn/2006_2_1.pdf, 1-5, p. 1, European Commission Report On Competition Policy 2006, available at http://ec.europa.eu/competition/publications/annual_report/2006/en.pdf, 1-35, p. 3, P. Marsden and P. Whelan, ‘Consumer Detriment’ And Its Application In EC And UK Competition Law, E.C.L.R., 2006, 27(10), 569-585, pp. 571 and 584, L. Gormsen, above note 8, p. 239 and G. Werden, Essays On Consumer Welfare And Competition Policy, 2009, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1352032, 1-30, p. 7.

this is based on the idea that a robust policy of preserving competitive market structures leads to an improvement of the firms' performance and an increase in consumers' welfare, while lack of efficient market structures leads to detrimental effects on the consumers⁸².

(II) Consumer Welfare

The role of the consumers in the assessment of concentrations has been gradually strengthened to such an extent that the consumers are regarded as the ultimate beneficiaries of EU merger policy and this position is in accordance with the ideas initially advocated by the Chicago school, but is more aligned to the post-Chicago school definition of 'consumer welfare'⁸³. This position is evident by the fact that EU Merger Control prohibits only concentrations which would harm the consumers' welfare, i.e. the criterion for the evaluation of the compatibility of mergers is essentially based upon a consumer welfare standard⁸⁴. Accordingly, substantial consumer harm must plausibly occur post-merger in order to condemn a concentration as anticompetitive⁸⁵. Thus, a merger is prohibited if it appears likely

⁸² I. Schmidt, *The Suitability Of The More Economic Approach For Competition Policy: Dynamic v. Static Efficiency*, E.C.L.R., 2007, 28(7), 408-411, p. 410 and P. Marsden and P. Whelan, above note 81, p. 569.

⁸³ G. Werden, above note 81, p. 7, N. Kroes, above note 35, p. 2, J. Vickers, *Opening Remarks At The European Competition And Consumer Day Conference*, 2005, available at http://www.oft.gov.uk/shared_of/speeches/sp0705.pdf, 1-5, p. 1, R. Wezenbeek, *Consumers And Competition Policy, The Commission's Perspective And The Example Of Transport*, E.B.L.R., 2006, 17(1), 73-82, pp. 73-74, C. Ahlborn and C. Grave, above note 5, p. 210 and E. Bannerman, *The Future Of EU Competition Policy*, 2002, available at http://www.cer.org.uk/sites/default/files/publications/attachments/pdf/2011/p297_competition_policy-1926.pdf, 1-60, p. 26.

⁸⁴ A. Riley, *The EU Reform Treaty And The Competition Protocol - Undermining EC Competition Law*, E.C.L.R., 2007, 28(12), 703-707, p. 707 and N. Kroes, above note 35, p. 2.

⁸⁵ G. Werden, above note 81, p. 5.

to harm the consumers and reduce their surplus as a result of a significant reduction in effective competition, while it is permissible if the consumers in the relevant market are likely to be at least as well off after the concentration as they were before it⁸⁶.

The Merger Regulation 139/2004 integrates the objective of protecting the consumers' interests by adopting a consumer welfare standard in the assessment of concentrations⁸⁷. This can be discerned by Article 2(1)(b) of the Merger Regulation 139/2004 which directs the Commission to take into account the interests of the consumers in undertaking a merger analysis. Also, the substantive test contained in Articles 2(2) and (3) of the Merger Regulation 139/2004 emphasises on the objective of preserving effective competition and accordingly it highlights the interests of the consumers due to the direct causal link which exists between these two concepts, i.e. the substantive test is consistent with the consumer welfare standard⁸⁸. Furthermore, the Horizontal Merger Guidelines set out that mergers will only be prohibited where they significantly increase the firms' market power in such a manner that they are likely to result in adverse effects on the consumers⁸⁹. Therefore, as a policy choice, in order to declare a merger incompatible with the Common Market, the Commission and the Courts must insist on sound evidence that, on balance, it

⁸⁶ K. Heyer, Welfare Standard And Merger Analysis: Why Not the Best?, C.P.I., 2006, 2(2), 29-54, pp. 30-31.

⁸⁷ Communication From The Commission, above note 3, p. 8 and A. Renckens, Welfare Standards, Substantive Tests And Efficiency Considerations In Merger Policy: Defining The Efficiency Defence, J.C.L.&E., 2007, 3(2), 149-179, p. 161.

⁸⁸ S. Zhu, Converge? Diverge? A Comparison Of Horizontal Merger Laws In The United States And European Union, World Competition, 2006, 29(4), 635-651, p. 651.

⁸⁹ Horizontal Merger Guidelines para. 8. See also, European Commission Report On Competition Policy 2004, 1, available at http://ec.europa.eu/competition/publications/annual_report/2004/en.pdf, 1-202, p. 75.

harms consumers, i.e. the consumer welfare standard provides the basis of the evidentiary requirements that the Commission must produce in order to prove anticompetitive effects⁹⁰.

Even though the notion of ‘consumers’ is not expressly defined in the Merger Regulation 139/2004 or the Horizontal Merger Guidelines, Article 2(1)(b) of the Merger Regulation 139/2004 offers an insight on that matter, since it provides that the interests of ‘intermediate and ultimate consumers’ should be assessed and accordingly it includes within the ambit of the concept of consumers both distributors as customers purchasing goods in the course of their trade as well as consumers at the end of the relevant distribution chain⁹¹. Since Article 2(1)(b) of the Merger Regulation 139/2004 focuses solely on the ‘intermediate and ultimate consumers’, the definition of consumer welfare relates to the notion of consumer surplus which refers to the difference between consumers’ valuations, i.e. the most they would be willing to pay and the price they actually pay, while it attributes zero weight to producers’ surplus, thereby reflecting the post-Chicago theorists’ ideas of consumer welfare that focused on the actual economic position of the consumers instead of total aggregate welfare. Consumer surplus is primarily realised through direct economic benefits received by the consumers of a particular product as measured by its price and quality, but it can also account for non-price attributes, i.e. choice, quality and innovation⁹². Lastly, it is notable that the adoption of a consumer welfare standard embodies wealth distribution considerations, since by placing sole weight on the consumers, its aim is to increase redistribution by moving some income from richer individuals, i.e. producers, to those who are less well off, i.e.

⁹⁰ K. Cseres, *The Controversies Of The Consumer Welfare Standard*, *The Competition Law Review*, 2007, 3(2), 121-173, pp. 121 and 136.

⁹¹ G. Werden, above note 81, pp. 5 and 16 and P. Marsden and P. Whelan, above note 81, p. 571.

⁹² K. Cseres, above note 90, p. 124 and G. Werden, above note 81, p. 8.

consumers, and prevent adverse redistribution by blocking those mergers likely to result in price increases to customers⁹³.

In collective dominance cases the consumers have occupied a central role in the competitive considerations, as the principal concern of the Commission and the Courts is whether the concentration under investigation would facilitate tacit collusion between the oligopolists post-merger which would result in higher prices and consequently in decreased consumers' welfare⁹⁴. Thus, in *Gencor/Lonrho* the Commission considered that 'the present merger will lead to the elimination of competition and to the creation of oligopolistic dominance to the detriment, ultimately, of the consumers' thereby declaring the concentration incompatible with the Common Market⁹⁵. Conversely, in *Airtours* the GC cleared the merger by taking into account the fact that the consumers would not be harmed by the concentration⁹⁶. Moreover, the emphasis on the consumers is discerned by the fact that a central role to the analysis of tacit coordination is occupied by the assessment of countervailing buyer power contained in the last condition of the *Airtours* test which, due to its cumulative nature, asserts that the appraisal of the consumers' position in the relevant market post-merger is an imperative condition⁹⁷. This criterion is mainly concerned with

⁹³ I. Lianos, above note 4, p. 22, L. Kaplow, On The Choice Of Welfare Standards In Competition Law, 2011, available at http://www.law.harvard.edu/programs/olin_center/papers/pdf/Kaplow_693.pdf, 1-19, pp. 12 and 19, R. Pittman, Consumer Surplus As The Appropriate Standard For Antitrust Enforcement, C.P.I., 2007, 3(2), 205-224, p. 223 and A. Padilla, Efficiencies In Horizontal Mergers: Williamson Revisited, 2005, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=812989, 1-41, pp. 26-27.

⁹⁴ A. Amelio et al., above note 53, p. 2 and J. Vickers, above note 3, p. 99.

⁹⁵ *Gencor/Lonrho* para. 142.

⁹⁶ *Airtours* paras 274-276.

⁹⁷ *Airtours* para. 62. Note also the discussion on countervailing buyer power at Ch. 2 and Ch. 3.

large buyers which fall within the category of ‘intermediary’ consumers, as it was held in *Enso/Stora* and *Pilkington/SIV*, but it also refers to the ultimate consumers, as it was set out in *Airtours* where the GC considered the likely reaction of the UK travellers to a possible price increase⁹⁸.

(III) Efficiencies

The increased focus on the consumers as a policy objective is evident by the recognition in the Merger Regulation 139/2004 and the Horizontal Merger Guidelines of efficiencies as an integral part of merger analysis in the EU, which reflects the Chicago school ideas as enriched by the post-Chicago theorists⁹⁹. Therefore, under the current legal framework, efficiencies generated by a merger may function as a shield and lead to the clearance of a concentration that would otherwise result in anticompetitive effects. This would be the case if a concentration enhances the ability as well as the incentive of the merged entity to act pro-competitively and generates efficiencies such as costs savings and new or improved products that increase the consumers’ welfare and outweigh any adverse effects of the transaction¹⁰⁰.

⁹⁸ *Airtours* paras 270-276, *Pilkington/SIV* para. 56 and *Enso/Stora* paras 84-97. See also, I. Gutu and U. Bernitz, The Effect Of EU Merger Policy On Large Multinationals Based In Sweden And Other Smaller EU Member States: Is The Policy Discriminatory?, E.C.L.R., 2003, 24(1), 19-29, p. 25.

⁹⁹ Note also the discussion on the inclusion of the efficiencies defence in the Merger Regulation 139/2004 and the Horizontal Merger Guidelines at Ch. 5. See also, L. Colley, From ‘Defence’ To ‘Attack’? Quantifying Efficiency Arguments In Mergers, E.C.L.R., 2004, 25(6), 342-349, pp. 342, 343 and 349, A. Christiansen, above note 2, p. 5 and I. Kokkoris, Assessment Of Efficiencies In Horizontal Mergers: The OFT Is Setting The Example, E.C.L.R., 2009, 30(12), 581-592, p. 582.

¹⁰⁰ Horizontal Merger Guidelines paras 76-77. See also, R. Wezenbeek, above note 83, pp. 77-78 and G. Stirati, The Appraisal Of Collective Dominance And Efficiency Gains Under The Substantive Test Of The New EU

The Horizontal Merger Guidelines impose three cumulative conditions which must be fulfilled in order to establish the efficiencies defence¹⁰¹. Firstly, the efficiencies must be merger specific, i.e. they must be likely to be accomplished by the proposed merger and unlikely to be accomplished in the absence of the concentration as well as they should not be able to be achieved through alternative means having less anticompetitive effects¹⁰². Secondly, the efficiencies must be verifiable, i.e. the Commission must be in a position to assess whether they are likely to materialize and it must be possible to foresee a clearly identifiable positive impact on the consumers as opposed to just a mere possibility¹⁰³. Thirdly, the efficiencies must directly benefit the consumers, i.e. they must lead to lower prices or other net benefits which should be passed-on to the consumers and they must be timely as well as substantial enough to outweigh any anticompetitive effects of the proposed transaction¹⁰⁴. This later condition is underlined by the ‘pass-on’ requirement clearly reflects wealth distribution considerations from producers to consumers.

Merger Regulation, Erasmus Law And Economic Review, 2004, 1(3), available at <http://www.eler.org/include/getdoc.php?id=44&article=12&mode>, 249–286, p. 276.

¹⁰¹ Horizontal Merger Guidelines paras 78-86. See also, I. Schmidt, above note 82, p. 409 and A. Renckens, above note 87, pp. 160-161.

¹⁰² Horizontal Merger Guidelines para. 85. See also, L. Colley, above note 99, p. 348 and M. Walker, Have The Economic Approaches To Merger Control In The EC And US Converged?, ICGL To Merger Control, 2005, available at http://www.crai.com/uploadedFiles/RELATING_MATERIALS/Publications/Consultant_publications/files/pub_4104.pdf, 20-24, p. 23.

¹⁰³ Horizontal Merger Guidelines para. 86. See also, L. Colley, above note 99, p. 349 and M. Walker, above note 102, p. 23.

¹⁰⁴ Horizontal Merger Guidelines paras 79-84. See also, S. Maudhuit and T. Soames, Changes In EU Merger Control: Part 2, E.C.L.R., 2005, 26(2), 75-82, p. 81 and J. Davies, R. Schlossberg, M. Jaspers and K.

Accordingly, the formulations in the Merger Regulation 139/2004 and the Horizontal Merger Guidelines suggest that EU Merger Control adopts a consumer welfare standard, instead of a total welfare standard, as the relevant threshold for the assessment of efficiencies. In particular, the implementation of a consumer welfare standard is consistent with both Article 2(1)(b) of the Merger Regulation 139/2004, which imposes the condition that technological and economic progress must be to the ‘consumers’ advantage’ in order to be considered in the analysis of concentrations and the Horizontal Merger Guidelines which provide that ‘the relevant benchmark in assessing efficiency claims is that consumers will not be worse off as a result of the merger’¹⁰⁵.

Nevertheless, the introduction of the efficiencies defence in EU Merger Control is not without problems. Specifically, whilst the Horizontal Merger Guidelines embody a trade-off between efficiencies and any anticipated anticompetitive effects, the method employed in undertaking such a balancing exercise is unclear and minimal guidance is provided¹⁰⁶. Also, the conditions set out in the Horizontal Merger Guidelines for the assessment of efficiencies appear difficult to be fulfilled if not prohibitive and this problem is especially acute in the evaluation of dynamic efficiencies. Thus, even though the Horizontal Merger Guidelines embody the post-Chicago school dictations by acknowledging that dynamic efficiencies may form a type of merger-related benefits linked to product or process innovation, its strict

Scholomiti, *Efficiencies – A Changing Horizon In Horizontal Merger Control*, 2007, available at http://www.gettingthedealthrough.com/narrative_pdf.php?id=11 (last visited 04/12/2010), 3-13, p. 7.

¹⁰⁵ Horizontal Merger Guidelines paras 77 and 79. See also, G. Stirati, above note 100, p. 276.

¹⁰⁶ M. Hughes and D. Wirth, *The Assessment Of Non-Horizontal Mergers Under EC And UK Merger Control*, 2010, available at <http://www.iclg.co.uk/khadmin/Publications/pdf/2427.pdf> (last visited 24/02/2011), 1-9, p. 2.

requirements can only to a very limited extent accommodate such considerations¹⁰⁷. In particular, the verification requirement demands the quantification of efficiencies and such a task is problematic in practice due to the difficulty to positively predict whether a firm's innovative activity will generate a certain output, whilst the condition that efficiencies must be timely in conjunction with the sliding-scale approach, i.e. the further in time efficiencies are expected to be realised the less weight is attributed to them, is incompatible with the long-term focused dynamic efficiencies¹⁰⁸. Lastly, the post-Merger Regulation 139/2004 case precedent reveals that there is no single decision in which the Commission relied exclusively on efficiencies claims in order to clear a concentration¹⁰⁹. On the contrary, it appears that the Commission takes efficiencies into account as only one among several factors that lead to a clearance decision and not as the exclusive condition for a finding of compatibility with the Common Market, which renders questionable the extent to which efficiencies justifications form in practice an individual de facto 'defence' as such to anticompetitive mergers¹¹⁰.

Efficiencies constitute a new element in the assessment of collective dominance merger cases and they may theoretically provide a defence to an anticompetitive concentration. Specifically, the Horizontal Merger Guidelines state that efficiencies may increase the merged entity's incentive to raise production and reduce prices thereby

¹⁰⁷ Horizontal Merger Guidelines para 81.

¹⁰⁸ Horizontal Merger Guidelines paras 79, 83 and 86.

¹⁰⁹ A. Renckens, above note 87, p. 161 and L. Colley, above note 99, p. 343.

¹¹⁰ The Commission has accepted the existence of efficiencies in a limited number of cases. In particular, efficiencies claims were accepted in *Korsnäs/AssiDomän Cartonboard* (Case COMP/M.4057 [2006]) paras 57-64 and *Procter & Gamble/Gillette* (Case COMP/M.3732 [2005]) paras 131-133 and 150, but they did not form the sole decisive factor for the clearance of those concentrations. See also, J. Briones, A Balance Of The Impact Of Economic Analysis On The EU Competition Policy, *World Competition*, 2009, 32(1), 27-39, pp. 32-33.

decreasing its incentive to coordinate its market behaviour with the other market participants¹¹¹. Nonetheless, from a practical point of view, this defence has been characterised as ‘terra incognita’ in collective dominance merger cases and this is evident by the fact that efficiencies have not been actively taken into account at all in the assessment employed in such cases both pre- but also post-Merger Regulation 139/2004¹¹². This stance is justifiable from a policy perspective, because the Commission and the Courts consider a merger that leads to the creation or the strengthening of a collective dominant position as likely to result in highly detrimental effects on the consumers and accordingly efficiencies could be acceptable as a defence only in rare circumstances, such as where they can be very clearly demonstrated and are of particularly substantial weight. The difficulty to establish this defence does not mean that any potential benefits to the consumers will not be taken into account in the assessment employed in collective dominance merger cases, but on the contrary that, having in mind the ultimate goal of protecting the consumers’ welfare, the threshold to be met and the quantity as well as the quality of efficiencies required for a successful claim could be possibly higher in this situation than in other violations of antitrust law. Therefore, this ‘all or nothing’ approach may result in dual benefits to the consumers in terms of either enhanced efficiencies or the protection from a particularly damaging anticompetitive merger.

(2) Price And Non-Price Factors

(I) Price Effects

In collective dominance cases the Commission and the Courts use prices as the variable upon which they assess potential anticompetitive effects and consumer harm.

¹¹¹ Horizontal Merger Guidelines para. 82.

¹¹² G. Werden, above note 81, p. 17.

Specifically, the Commission and the Courts focus on the objective to condemn the loss that the consumers may suffer in case the price charged to them rises, in accordance with the traditional economic approach to market power which is concerned with power over price¹¹³. Thus, a concentration would be prohibited if it would make coordination a feasible strategy post-merger and it would lead to prices higher than those that would have prevailed ‘but for’ the merger, because in such circumstances it would distort effective competition and it would diminish the consumers’ welfare. Accordingly, in collective dominance cases the focus of the analysis is on the oligopolists’ post-merger conduct in relation to prices. In particular, the fulfilment of all the *Airtours* conditions is assessed on the basis of the price factor, since coordination usually involves a tacit consensus on a common policy of supra-competitive prices¹¹⁴, price transparency is a crucial criterion in assessing market transparency¹¹⁵, retaliation mechanisms have prices as their focal point and price wars constitute a usual punishment method, whilst the absence of external countervailing reaction relates to the inability of fringe firms, mavericks and potential competitors to impose lower prices or the inelasticity of demand by the consumers in response to a price rise.

The case precedent confirms that the Commission and the Courts primarily emphasise on the price factor in the assessment of collective dominance merger cases. Specifically, in *Nestle/Perrier* the Commission held that price competition was weakened, that there was a high degree of price transparency in the market and price parallelism among the duopolists,

¹¹³ B. Lyons, above note 3, p. 6, R. Lind and P. Muysert, *Innovation And Competition Policy: Challenges For The New Millennium*, E.C.L.R., 2003, 24(2), 87-92, pp. 88-89 and D. Evans and C. Grave, above note 8, p. 140.

¹¹⁴ Exceptions to this rule are the decisions in *Airtours* and *UPM-Kymmene/Haindl* (Case COMP/M.2498 [2001]) which concerned coordination in capacities.

¹¹⁵ *Gencor* para. 227.

while the absence of effective competition would lead to higher prices¹¹⁶. In *Gencor/Lonrho* the Commission considered that the low degree of price competition between the oligopolists and the sustained high price levels pointed towards collective dominance¹¹⁷. In *Gencor* the GC held that in the context of collective dominance the oligopolists may implicitly align their conduct in order to increase their prices¹¹⁸. Also, in *Airtours* the GC held that the aim of a collective dominant group is to sell ‘at above competitive prices’¹¹⁹. Moreover, in *Impala* the GC held that a condition for the fulfilment of the indirect test revolved around the alignment of prices at a supra-competitive level held over time¹²⁰. Additionally, in *Sony* the ECJ focused on the likelihood of post-merger price increases¹²¹. Lastly, in *ABF/GBI* the Commission held that prices constituted the variable upon which the coordinated mechanism would operate¹²².

(II) Non-Price Effects

The potential anticompetitive non-price effects of a merger assessed for collective dominance revolve around the factors of reduced choice, innovation and quality.

EU merger policy considers choice as a necessary element for consumer welfare and it intends to ensure that the marketplace remains competitive by preserving a sufficient, although not necessarily a perfect, range of options of competing products from which the

¹¹⁶ *Nestle/Perrier* paras 118, 121 and 128.

¹¹⁷ *Gencor/Lonrho* paras 162 and 165.

¹¹⁸ *Gencor* para. 277.

¹¹⁹ *Airtours* para. 61.

¹²⁰ *Impala* para. 252.

¹²¹ *Sony* para. 121.

¹²² D. Neven and M. De La Mano, above note 33, p. 329 and A. Amelio et al., above note 53, p. 6.

consumers may choose¹²³. A competitive market leads to more choices, since the firms' goal to gain new sales increases the spectrum of available choices¹²⁴. Conversely, an anticompetitive horizontal merger may restrict the range of options available to the consumers¹²⁵. Nevertheless, even though choice was an issue which was taken into account in *Nestle/Perrier* and *Gencor/Lonrho*, insubstantial weight is attributed to this factor as compared to the price element in the assessment of collective dominance merger cases and this is evident by the lack of extensive as well as consistent consideration of such a variable in the relevant precedent¹²⁶.

The maintenance of effective competition and the protection of the consumers' welfare are also dependent on the extent to which a merger increases or decreases the firms' incentives to engage in product and/or process innovation post-merger¹²⁷. The relationship between competition and innovation is mutual in that competition stimulates the incentives to

¹²³ Horizontal Merger Guidelines para. 8. See also, I. Haracoglou, Competition Law, Consumer Policy And The Retail Sector: The Systems' Relation And The Effects Of A Strengthened Consumer Protection Policy On Competition Law, *The Competition Law Review*, 2007, 3(2), 175-208, p. 178, R. Lande, Consumer Choice As The Ultimate Goal Of Antitrust, *University Of Pittsburgh Law Review*, 2001, 62(3), 503-525, pp. 503-504, R. Smith and S. King, Does Competition Law Adequately Protect Consumers?, *E.C.L.R.*, 2007, 28(7), 412-424, p. 413 and S. Waller, In Search Of Economic Justice: Considering Competition And Consumer Protection Law, *Loyola University Chicago Law Journal*, 2005, 36, 631-639, p. 636.

¹²⁴ T. Muris, The Interface Of Competition And Consumer Protection, Fordham Corporate Law Institute's Twenty-Ninth Annual Conference On International Antitrust Law And Policy, 2002, available at <http://www.ftc.gov/speeches/muris/021031fordham.pdf>, 1-30, pp. 3-4 and J. Vickers, above note 83, p. 2.

¹²⁵ R. Lande, above note 123, p. 507 and N. Averitt and R. Lande, Consumer Sovereignty, A Unified Theory Of Antitrust And Consumer Protection Law, *Antitrust L.J.*, 1997, 65, 713-756, pp. 755-756.

¹²⁶ *Nestle/Perrier* paras 83 and 89 and *Gencor/Lonrho* para. 186.

¹²⁷ Horizontal Merger Guidelines para. 8.

innovate, while innovation brings about dynamic efficiencies that may increase the consumers' welfare and may counteract any anticompetitive effects¹²⁸. However, despite the fact that in collective dominance cases the Commission and the Courts assess the degree of innovation in the relevant market, as such a factor may facilitate or make more difficult the adoption and the sustainability of collusive conduct, no further consideration is attributed to the potential adverse impact of a merger on innovation and this position contradicts the increased emphasis placed by the industrial organisation theorists on the potential loss of R&D competition¹²⁹.

Quality detriment occurs where the consumers may purchase a product or a service which is not of the quality they assumed *ex ante*. Quality is also a factor which is not extensively considered in the assessment of the potential negative effects of a merger analysed for collective dominance on effective competition and the consumers' welfare. This can be demonstrated by the fact that there is no collective dominance case where the Commission and the Courts have shed an increased focus on the adverse impact of the concentration on product quality as a justification for its prohibition or its conditional clearance.

Overall, in the analysis of collective dominance merger cases the Commission's primary if not exclusive focus is on the price effects of a concentration and it is submitted that prices do indeed constitute an important parameter of competition. Nevertheless, the

¹²⁸ P. Lowe, *Competition Policy And The Global Economic Crisis*, C.P.I., 2009, 5(2), 3-24, p. 5, C. Ahlborn and C. Grave, *above note 5*, p. 213 and J. Gual, *Time To Rethink Merger Policy?*, C.P.I., 2007, 1(3), 29-44, pp. 42-43.

¹²⁹ Note also the discussion on innovation at Ch. 3.

Commission's lack of emphasis on the possibility that a concentration may raise adverse competitive effects in relation to non-price variables forms a gap in the current analytical framework for the assessment of collective dominance in mergers which extends to two specific scenarios. On the one hand, a merger may not result in higher prices but it may bring about significant adverse effects to non-price variables and in such a scenario the Commission's sole focus on the price element of competition may cause merger review to miss important anticompetitive effects. On the other hand, a merger may produce adverse effects as regards both the price and non-price elements of competition and in this scenario the consideration of non-price variables is necessary in order to reveal the full extent of possible anticompetitive effects so as to perform an adequate counterfactual analysis and consider them in the trade-off with potential efficiencies or for the imposition of appropriate remedies.

Accordingly, it is suggested that the Commission must integrate in its appraisal and seed an increased emphasis on the potential negative impact of concentrations on the non-price elements of competition, especially in view of the fact that coordination appears feasible to occur in relation to non-price variables such as innovation or quality. On the one hand, in the assessment of the effects of a merger on innovation a static analysis focusing on the short-term perspective of the relevant market is not appropriate, but the Commission must take a dynamic analysis emphasising on the longer-term perspective and place an increased emphasis on potential competitors as new entrants often drive innovation¹³⁰. Accordingly, the

¹³⁰ G. Sidak and D. Teece, Favoring Dynamic Competition, 2009, available at http://www.criterioneconomics.com/pdfs/Sidak-Teece_Favoring%20Dynamic%20Competition%20037.pdf, 1-55, pp. 22-23, 32 and 37, and M. Katz and H. Shelanski, Mergers And Innovation, Antitrust L.J., 2007, 74, 1-85, p. 15.

Commission must analyse the likelihood of coordinated effects by identifying the actual competitors in the R&D for a future product and assess whether the merger would increase their ability as well as their incentive to adopt and sustain a strategy to reduce innovation efforts, but primarily in must identify potential competitors and assess their capabilities¹³¹. The attainment and sustainability of a tacitly collusive scheme aimed at the reduction of innovation seems difficult, but it is not impossible¹³². In particular, the adoption of an implicit policy of coordination in R&D may be complex due to the multi-dimensional elements of innovation efforts, but it seems feasible that firms may reach a tacit understanding not to conduct any R&D¹³³. Also, the sustainability of coordination can be problematic, since R&D involves private information and accordingly monitoring of innovation efforts is difficult, while in case of deviation due to successful R&D efforts the oligopolists would not be able to effectively retaliate if innovation is drastic because the imposition of punishment through the development of equally or more innovative products may only happen with long time lags and price wars would not be an adequate deterrent towards a radically innovative product¹³⁴.

¹³¹ M. Katz and H. Shelanski, above note 130, pp. 12 and 41, A. Tepperman and M. Sanderson, Innovation And Dynamic Efficiencies In Merger Review, available at <http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/02376.html>, 1-39, pp. 18-19, R. Davis, Innovation Markets And Merger Enforcement: Current Practice In Perspective, Antitrust L.J., 2003, 71(2), 677-703, p. 686 and R. Gilbert and S. Sunshine, Incorporating Dynamic Efficiency Concerns In Merger Analysis: The Use Of Innovation Markets, Antitrust L.J. 1994-1995, 63, 569-601, p. 590.

¹³² R. Gilbert and S. Sunshine, above note 131, p. 597 and R. Gilbert and D. Rubinfeld, Revising the Horizontal Merger Guidelines: Lessons From The US And The EU, available at <http://www.law.berkeley.edu/faculty/rubinfeldd/Profile/publications/Merger%20Guidelines%20China%208%2012%2010.pdf>, 1-21, p. 15.

¹³³ M. Katz and H. Shelanski, above note 130, p. 47.

¹³⁴ R. Gilbert and S. Sunshine, above note 131, pp. 591-592 and M. Katz and H. Shelanski, above note 130, p. 48.

Nevertheless, in situations of moderate innovation the remaining firms may be able to punish the defecting firm in a timely manner through the engagement in aggressive pricing. Lastly, since R&D success can come from potential competitors, any collusive agreement to suppress innovation would be vulnerable to new entry, even though the presence of high barriers to entry or the erection of entry barriers through ‘parallel exclusion’ may be capable to stop such entry¹³⁵. On the other hand, the adoption and the sustainability of a collusive strategy on a standardised low quality product seems to be more feasible. In particular, reaching terms of coordination as well as monitoring would be straightforward in situations of standardisation to a low quality product, especially in highly homogeneous markets. Moreover, retaliation would consist of either reverting to the previous (higher) quality product, as such a response to deviations seems capable to occur in a timely manner in most industries, or the colluding firms may also retaliate by engaging in price wars. Also, high entry barriers must be present in order to prevent the entry of a competitor that would afford a more efficient product quality/price ratio.

(3) Non-Competition Considerations

A number of arguments have been raised which are both in favour and against the inclusion of non-competition considerations as an integral policy objective in the assessment of mergers. On the one hand, a more flexible view supports that since EU merger policy forms part of the legislative framework of the TFEU, which includes numerous objectives, it will always have to contribute towards the overriding political goal of the day, such as the global competitiveness of the European industries, thereby leaving the door open for the

¹³⁵ A scenario of parallel exclusion is relevant in situations where firms compete in innovation. Note also the discussion on parallel exclusion at Ch. 6.

inclusion of non-competition considerations in the appraisal of concentrations¹³⁶. On the other hand, a more restrictive opinion indicates that a single objective of EU merger policy, centred on the preservation of effective competition and its benefit on the consumers' welfare to the exclusion of other goals, improves the effectiveness of the Merger Regulation, it provides clearer guidance on the applicable competitive assessment and it leads to more consistent and rational decisions¹³⁷.

The Merger Regulation 139/2004 implements the restrictive position as it demonstrates that non-competition objectives will not enter the assessment of concentrations. Specifically, the substantive test of the Merger Regulation 139/2004 is exclusively based on competition related considerations, since it focuses on the single objective of the preservation of effective competition as a means to protect the consumers' welfare¹³⁸. Also, Article 2(1) of the Merger Regulation 139/2004 contains a set of criteria to be taken into account in determining the compatibility of mergers, which are centred on competition related considerations and accordingly it seems that there is no room for the consideration of non-

¹³⁶ This argument is based on Recital 23 of the Merger Regulation 139/2004 which states that 'the Commission must place its appraisal within the general framework of the achievement of the fundamental objectives referred to in Article 2 TEU'. See also, J. Galloway, above note 11, pp. 174-175, DG Comp Annual Management Plan 2005, available at http://ec.europa.eu/competition/publications/annual_management_plan/amp_2005_en.pdf, 1-25, p. 3, A. Murray, *A Fair Referee? – The European Commission And EU Competition Policy*, Centre For European Reform, First Edition, 2004, pp. 3, 4 and 7 and OECD Country Studies, above note 78, p. 15.

¹³⁷ A. Christiansen, above note 2, pp. 19-20, P. Lowe, above note 128, p. 19, C. Ahlborn, Competition Policy In The New Economy - Is European Competition Law Up To The Challenge?, E.C.L.R., 2001, 22(5), 156-167, pp. 165-166 and C. Ahlborn and C. Grave, above note 5, p. 210.

¹³⁸ K. Fountoukakos and S. Ryan, above note 60, p. 279, OECD Country Studies, above note 78, p. 31 and M. Motta, above note 19, p. 203.

competition objectives¹³⁹. Nonetheless, there might be a possible exception to this principle, located in the reference of Article 2(1)(b) to the ‘development of economic progress’, which will be examined in order to determine whether it does give rise to the inclusion of non-competition considerations in the assessment of concentrations.

Industrial Policy Considerations

The non-competition objectives mainly revolve around industrial policy considerations. There are two instances of such considerations that have been urged to be included within the analysis of mergers. One such instance is directed towards the promotion of ‘national champions’ and it is based on the abovementioned Article 2(1)(b) of the Merger Regulation 139/2004¹⁴⁰. An alternative expression of such considerations is the failing firm defence.

The ‘national champions’ argument constitutes a form of protectionism that is advanced by national industrial policy and by which the Member States’ governments encourage firms in strategic sectors to merge into a single enterprise in order to increase their competitiveness in international markets¹⁴¹. However, protectionist goals are in sharp contrast with the TFEU rules and in addition EU merger policy regards such practices as highly likely to result in the distortion of effective competition at the expense of the national consumers¹⁴².

¹³⁹ D. Banks, above note 79, p. 182.

¹⁴⁰ L. Hawkes, *The EC Merger Control Regulation: Not An Industrial Policy Instrument: The De Havilland Decision*, E.C.L.R., 1992, 13(1), 34-38, p. 36.

¹⁴¹ A. Soares, ‘National Champions’ Rhetoric In European Law Or The Many Faces Of Protectionism, *World Competition*, 2008, 31(3), 353-368, pp. 353, 358 and 368, L. McGowan, above note 55, p. 14 and D. Banks, above note 79, p. 185.

¹⁴² L. McGowan, above note 55, p. 14.

Hence, the Commission and the Courts do not treat with favouritism nor promote ‘national champions’, as this kind of economic protectionism cannot be justified under any circumstances¹⁴³. Accordingly, the aims pursued by industrial policy will have to be achieved ultimately by preserving the principle of effective competition¹⁴⁴.

The failing firm defence revolves around the claimed neutral effects of mergers on competition, where one of the merging firms is liquidating due to poor financial performance¹⁴⁵. This defence has been shaped and applied in a very stringent way, since it is considered that it might aim to rescue a firm in financial distress by clearing a concentration that may prove to be anticompetitive post-merger and also because it principally focuses on the firms rather than the consumers. The main requirement that must be fulfilled in order to establish the failing firm defence concerns the lack of causality, i.e. that the deterioration of the competitive structure that follows the merger cannot be said to be caused by the concentration and that it would occur in a similar manner even in the absence of the merger¹⁴⁶. The lack of causality must be verified by the fulfilment of the cumulative conditions which the Commission developed in *Kali and Salz* and provide that but for the merger the failing firm would exit the market due to financial difficulties, that there is no less anticompetitive alternative purchase than the notified merger and that absent the concentration the assets of the failing firm would inevitably exit the market¹⁴⁷.

¹⁴³ J. Galloway, above note 11, p. 172 and E. Bannerman, above note 83, p. 11.

¹⁴⁴ Communication From The Commission, above note 3, p. 4.

¹⁴⁵ D. Banks, above note 79, p. 184.

¹⁴⁶ *Kali and Salz* para. 72 and Horizontal Merger Guidelines para. 89.

¹⁴⁷ *Kali and Salz* para. 71 and Horizontal Merger Guidelines para. 90. See also, P. Lowe, above note 128, p. 18, S. Zhu, above note 88, pp. 644-645 and V. Baccaro, Failing Firm Defence And Lack Of Causality: Doctrine And Practice In Europe Of Two Closely Related Concepts, E.C.L.R., 2004, 25(1), 11-24, p. 13.

In the context of collective dominance cases, the Commission in *Kali and Salz* held that the requirements for the establishment of the failing firm defence had been fulfilled and it cleared the concentration by holding that it was not the cause of the reinforcement of a collective dominant position on the German market¹⁴⁸. Also, as a matter of principle the validity of the application of the failing firm defence in a collective dominance framework of analysis was expressly confirmed by the ECJ in *France v. Commission*¹⁴⁹. However, these cases were decided under the old structural analysis undertaken in Phase I, while the change of policy in the assessment of concentrations in Phases II and III and in particular the introduction of the effects-based approach would make such a defence difficult to be successfully applied in collective dominance merger cases. Specifically, since the effects-based approach focuses directly on the effects of a concentration on competition, it seems difficult to reverse the Commission's conclusion that the merger under investigation would result in an adverse impact on effective competition once such an outcome has been established. Moreover, it is difficult to reconcile the policy objective that focuses on the protection of the consumers' welfare with concentrations that assist inefficient firms. Thus, it seems that this defence may be successfully raised only if it is accompanied by efficiencies directed towards the benefit of the consumers and flowing from the rescuing of the merger, which in turn makes its establishment more difficult and diminishes its applicability in collective dominance cases¹⁵⁰.

¹⁴⁸ *Kali and Salz* para. 95.

¹⁴⁹ *France v. Commission* paras 109-124. See also, G. Zekos, above note 3, p. 40.

¹⁵⁰ K. Heyer and S. Kimmel, Merger Review Of Firms In Financial Distress, G.C.P., 2009, 5(2), 103-118, pp. 110-111.

(D) CONCLUSION

Policy considerations have played a central role on the evolution of the analysis of collective dominance in mergers and they have set out the objectives pursued by the regulation of such anticompetitive positions.

The development of policy considerations has affected the evolution of the collective dominance analysis in its various Phases. In Phase I the concept of collective dominance was included within the scope of application of the Merger Regulation 4064/89, which adopted a ‘dominance’ standard for the appraisal of concentrations in accordance with the ordoliberalists’ ideas. Also, the foundation of collective dominance under the Merger Regulation was formed by the integration of the principles established in Article 102 collective dominance cases, as evident by the necessity to demonstrate the presence of links. Additionally, policy considerations that were based on the Harvard school ideas led to the application of a static SCP framework that focused on the analysis of structural characteristics through the employment of a simplistic checklist approach which allowed an increased degree of intervention, whilst the respective policy objective emphasised on the protection of the freedom of market participants to compete in the relevant industry. In Phase II the policy considerations aligned to the ideas of the industrial organisation theorists, which resulted to the evolution of the analysis of collective dominance and its departure from its former status. Specifically, a dynamic analysis was employed that emphasised on the firms’ behaviour along structural factors and led to the adoption of an effects-based approach. Also, the Courts employed a more economic approach that was directly expressed by the *Airtours* economics-based criteria and the identification of tacit collusion as the foundation of the collective dominance analysis. The cumulative *Airtours* conditions replaced the checklist approach and pointed towards a more demanding threshold of proof that led to a decline in

enforcement, whilst the policy objective was directed towards the protection and enhancement of consumer welfare. Furthermore, the demonstration of oligopolistic interdependence replaced the necessity to prove structural links. In Phase III the previous approach was verified and elaborated. Thus, the Merger Regulation 139/2004 substantive test and the Horizontal Merger Guidelines confirmed the application of a more economic and effects-based approach in the analysis of collective dominance and integrated the consumer welfare goal in the analysis of concentrations. Moreover, the *Impala* indirect test produced important policy implications, as it introduced a flexible approach on the establishment of the *Airtours* criteria, it shed an increased focus on the firms' behaviour and it implemented a more finely balanced approach between legal and economic considerations. The ECJ in *Sony* verified the applicability of both the stringent *Airtours* test as well as the more lenient *Impala* indirect test and pointed out the necessity to establish a hypothetical coordination mechanism as a basis of the assessment thereby further adjusting the analysis of collective dominance with economic theory. The policy developments that ensued in Phases II and III were applied in practice by the Commission in *ABF/GBI* with the notable exception of the non-application of the *Impala* test.

The policy objective that underlines the regulation of collective dominance in mergers is centred on the preservation of effective competition as a means to protect the consumers' welfare. The emphasis on the protection of the consumers' interests reflects the Chicago but is fully aligned to the post-Chicago school ideas and this is evident by the fact that the Merger Regulation 139/2004 and the Horizontal Merger Guidelines adopt a consumer welfare standard in the assessment of the compatibility of concentrations that solely focuses on the consumers' surplus, whilst the consumers occupy a central role in the consideration of mergers assessed for collective dominance. Furthermore, the Merger Regulation 139/2004

and the Horizontal Merger Guidelines embodied the dictations of the Chicago and post-Chicago school theorists by recognising the role of efficiencies in the assessment of concentrations and adopted a consumer welfare standard in their quantification. However, the demonstration of efficiencies presents complexities, especially as regards dynamic efficiencies, whilst they seem difficult to be established as a defence in the assessment of collective dominance merger cases. Moreover, in the examination of collective dominance cases the Commission and the Courts primarily focus on the price effects of a concentration in order to assess its potential detrimental impact on effective competition and the consumers' welfare, while its effects on the non-price elements of competition are trivially considered. Nevertheless, it is imperative for the Commission to seed an increased focus on the non-price elements of competition, especially in view of the fact that coordination seems feasible to occur in relation to variables such as innovation or quality. Lastly, the Merger Regulation 139/2004 does not integrate non-competition objectives within its provisions and accordingly industrial policy considerations do not form part of the assessment of concentrations.

CHAPTER 5

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THE ‘SIGNIFICANT IMPEDIMENT TO EFFECTIVE COMPETITION’ TEST AND THE HORIZONTAL MERGER GUIDELINES: EFFECTS ON THE ASSESSMENT OF COLLECTIVE DOMINANCE

(A) INTRODUCTION

As a result of previous policy developments, in 2004 the ‘new’ Merger Regulation 139/2004 was introduced that modified the substantive standard for merger appraisal, whilst in conjunction with the accompanying Horizontal Merger Guidelines they modernised the framework of merger analysis by accommodating the more economic and effects-based approach.

The Merger Regulation 139/2004 revised the ‘old’ Merger Regulation 4064/89 and amended the substantive test for the appraisal of concentrations. The change of the substantive test affected the assessment of concentrations in the EU, because such a test lies at the heart of any merger investigation, as it is the spectrum through which the Commission and the Courts evaluate the compatibility of a concentration with the Common Market. Specifically, the substantive test forms the threshold that must be established in order to distinguish anticompetitive from pro-competitive concentrations and to that extent it forms a central element in the appraisal of mergers. Along with the new Merger Regulation, the Commission launched the Horizontal Merger Guidelines. Despite the fact that the Horizontal Merger Guidelines were not legally binding, they provided a methodology for the assessment

of potential anticompetitive effects and they defined the criteria on which the Commission would focus in order to challenge a concentration.

This Chapter analyses the effects of the ‘significant impediment to effective competition’ test and of the Horizontal Merger Guidelines on the appraisal of collective dominance merger cases. Section B focuses on the background to the reform of the substantive test by presenting the arguments that were raised in favour and against the replacement of the ‘dominance’ standard. Section C emphasises on the significant impediment to effective competition test contained in the Merger Regulation 139/2004, by highlighting its alterations on the form of the appraisal undertaken in concentrations, its effects on the substantive analysis of collective dominance merger cases and the resulting policy implications. Section D centres on the Horizontal Merger Guidelines and the analytical framework that they introduce for the examination of coordinated effects, while it also compares them to the approach of the Non-Horizontal Merger Guidelines in the assessment of such a theory of harm. Section E evaluates the degree of convergence between the EU and the US Merger Control systems in the analysis of coordinated effects. Finally, Section F outlines the effects of the new merger appraisal test and of the Horizontal Merger Guidelines on the examination of concentrations assessed for collective dominance.

(B) BACKGROUND

(1) Introduction

In 2001 the Commission produced a Green Paper on the reform of EU Merger Control, which launched a debate as to how the effectiveness of the dominance test, contained in the Merger Regulation 4064/89, compared to the substantial lessening of competition standard adopted in several other jurisdictions and raised the issue of a possible

amendment of the EU substantive test for the appraisal of concentrations¹. Thereafter, many arguments were raised that favoured both the retention of the dominance test as well as its replacement by the substantial lessening of competition test. However, to some extent the issue was not whether EU Merger Control would employ either test as its merger appraisal standard, but whether the Commission and the Courts were prepared to modernize the tools used in the analysis of concentrations and interpret the substantive test in such a way as to allow a more economic approach in merger assessment, to redirect their focus on the firms' behaviour on the market and to scrutinize the effects of concentrations on competition². The arguments presented, besides highlighting the advantages and disadvantages of each substantive test, they primarily exposed some crucial problems of the old EU Merger Control system, which are important to be examined in order to ascertain whether the new merger appraisal test and its regulatory framework successfully addressed these issues.

¹ For example, the 'substantial lessening of competition' forms the substantive standard for the appraisal of concentrations in the US (Section 7 of the Clayton Act). See also, M. Litzell, *The Appraisal Of Collective Dominance Under The Clarified Substantive Test Of The New EC Merger Regulation - A Step Towards Greater Global Convergence Of Merger Control?*, 2005, available at http://www.elsa.org/fileadmin/user_upload/elsa_international/PDF/SPEL/SPEL05_1_MARIA_LITZELL.pdf, 32-56, p. 35, K. Fountoukakos and S. Ryan, *A New Substantive Test For EU Merger Control*, E.C.L.R., 2005, 26(5), 277-296, p. 283, N. Reed and P. Camesasca, *European Merger Control: Tougher, Softer, Clearer?*, E.C.L.R., 2003, 24(9), 458-462, p. 458, P. Lowe, *The Future Shape Of European Merger Control*, Speech At The RBB/FIPRA Seminar, 2003, available at http://ec.europa.eu/competition/speeches/text/sp2003_045_en.pdf, 1-10, p. 4 and I. Kokkoris, *Do Merger Simulation And Critical Loss Analysis Differ Under The SLC And Dominance Test?*, E.C.L.R., 2006, 27(5), 249-260, p. 250.

² U. Denzel, *The US 'Significant Lessening Of Competition' Merger Enforcement Standard And The EU 'Dominant Position' Test – A Comparison*, Seminar Advanced Antitrust Judge Richard Posner, 2002, available at <http://home.uchicago.edu/~rposner/denzel2.htm>, 1-25, pp. 24-25.

(2) Arguments In Favour Of Retaining The Dominance Test

The principal argument in favour of the retention of the dominance test supported that, whilst the substantial lessening of competition test was different to the dominance test as regards its wording, in practice both tests pursued the same objective of prohibiting anticompetitive mergers and also there was little difference between the analytical processes employed under each test, as the focus was shed on the same factors, i.e. market shares, barriers to entry etc.³. Accordingly, it was argued that these tests produced broadly similar outcomes, which led to the proposition that there was no need to change the dominance test as the substantive prohibition criterion in the EU⁴. Another argument claimed that the considerable body of EU precedent, which had been developed under the dominance standard, would be abandoned if a different test would be adopted⁵. Moreover, an argument

³ M. Monti, Review Of The EC Merger Regulation – Roadmap For The Reform Project, Conference On Reform Of European Merger Control, 2002, available at <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/02/252&format=HTML&aged=1&language=en&guiLanguage=en>, 1-10, p. 5, P. Lowe, above note 1, p. 5, U. Boege, Speech At The ICN First Annual Conference, 2002, available at <http://www.internationalcompetitionnetwork.org/uploads/library/doc584.pdf>, 1-6, pp. 3-4, M. Litzell, above note 1, p. 41, U. Denzel, above note 2, p. 23 and White and Case, Draft Memorandum - Green Paper On Merger Reform, 2002, available at http://www.whitecase.com/files/Publication/2057337d-9436-4562-bdae-638e79912682/Presentation/PublicationAttachment/12fdd6bd-0507-4c10-9d6f-644e8899ab69/memo_competition_group.pdf, 1-10, p. 6.

⁴ A. Nourry and S. McNulty, EC Merger Reform – From One-Stop Shop To All Over The Shop?, C.L.I., 2003, February, 5-8, p. 6, EU Committee Of The American Chamber Of Commerce In Belgium, Response To The Green Paper On The Review Of The Merger Regulation (Council Regulation No. 4064/89), 2002, available at <http://www.amchameu.eu/> (last visited 17/02/2009), 1-14, p. 6 and M. Litzell, above note 1, p. 35.

⁵ M. Monti, above note 3, p. 5, U. Immenga, Merger Control In Europe And Germany: Recent Developments, Competition Policy And Economic Development, 2002, available at

against the amendment of the dominance test centred on the claim that the substantial lessening of competition standard would be too uncertain in its scope, since it was more flexible than the dominance standard and it was open to varying interpretation mainly because of the vague meaning of the word ‘substantial’⁶. Lastly, it was asserted that the substantial lessening of competition standard contained lower thresholds than the dominance standard and consequently it would increase the Commission’s degree of intervention and its margin of discretion in the appraisal of concentrations⁷.

(3) Arguments In Favour Of Switching To The Substantial Lessening Of Competition Test

The principal criticism directed against the retention of the dominance test was sourced at the problem of the ‘gap’, i.e. that there were serious competition problems that mergers may engender but which were not capable of being tackled by using the dominance test because it had certain limitations⁸. In particular, the dominance test focused on the

http://law.wustl.edu/wugslr/issues/volume3_2/p441Immenga.pdf, 441-453, p. 444, A. Burnside and G. Brooks, EC Merger Reform – Substantive Issues In The Draft Notice On Horizontal Mergers: Paramount Confusion?, C.L.I., 2003, February, 3-5, p. 3, M. Egge, M. Bay and J. Calzado, The New EC Merger Regulation: Recipe For Profound Change Or More Of The Same?, IBA 8th Annual Competition Conference, 2004, available at http://www.lw.com/upload/pubContent/_pdf/pub1063_1.pdf, 1-30, p. 5 and White and Case, above note 3, p. 6.

⁶ K. Fountoukakos and S. Ryan, above note 1, p. 283 and European Round Table Of Industrialists - Competition Policy Task Force, Response To The ‘Green Paper On The Review Of Council Regulation (EEC) No 4064/89’, 2001, available at http://www.ec.europa.eu/competition/consultations/2002_council_regulation/ert.pdf, 1-4, p. 2.

⁷ V. Selvam, The EC Merger Control Impasse: Is There A Solution To This Predicament?, E.C.L.R., 2004, 25(1), 52-67, p. 61 and U. Immenga, above note 5, p. 444.

⁸ The ‘gap’ refers to the scenario where a single firm holding a market share below that required for the establishment of single firm dominance, derives benefits from the exercise of unilateral non-collusive behaviour on the market. An example of such a situation is the US *Heinz-Beechnut* case, where the anticompetitive effects

question of whether a proposed concentration would create or strengthen a dominant position with the consequence that the Commission could not challenge mergers producing unilateral effects, as despite the fact that they could be detrimental to competition, they would not result in market dominance⁹. Conversely, the substantial lessening of competition standard did not emphasise on the establishment of dominance, but instead it centred on the question of how much competition would be lost as a result of the concentration under investigation and accordingly it was perfectly capable to address the unilateral effects of mergers¹⁰.

of a merger between the second and third strongest market players resulted from the elimination of competition for the second place in the market. See also, A. Heimler, Was The Change Of The Test For Merger Control In Europe Justified? An Assessment (Four Years After The Introduction Of SIEC), E.C.J., 2008, 4(1), 85-94, p. 90, A. Riesenkampff, The New EC Merger Control Test Under Article 2 Of The Merger Control Regulation, Northwestern Journal Of International Law And Business, 2003-2004, 24, 715-728, p. 717, M. Litzell, above note 1, p. 41 and J. Vickers, How To Reform The EC Merger Test?, A Speech At The EC/IBA Merger Control Conference, 2002, available at http://www.oft.gov.uk/shared_of/speeches/spe0802.pdf, 1-4, p. 2.

⁹ M. Motta, EC Merger Policy And The *Airtours* Case, E.C.L.R., 2000, 21(4), 199-207, p. 202, No Cited Author, Council First Pass At Draft Revision Of The Merger Regulation, C.L.I., 2003, June, 22-23, p. 23, V. Selvam, The Substantive Test In EC Merger Control: How The Commission's Proposals Fills The Perceived Gaps, C.L.I., 2003, October, 19-21, p. 19 and G. Stirati, The Appraisal Of Collective Dominance And Efficiency Gains Under The Substantive Test Of The New EU Merger Regulation, Erasmus Law And Economic Review, 2004, 1(3), available at <http://www.eler.org/include/getdoc.php?id=44&article=12&mode>, 249-286, p. 256. Nevertheless, it was also claimed that the dominance test, if properly interpreted, was capable of dealing with the full range of anticompetitive scenarios which mergers may engender (see also, U. Boge and E. Muller, From The Market Dominance Test To The SLC Test: Are There Any Reasons For A Change?, E.C.L.R., 2002, 23(10), 494-498, p. 496 and P. Lowe, The Future Of EU Merger Control, Comp. Law, 2002, 310-317, p. 312).

¹⁰ P. Lowe, above note 1, pp. 4-5 and S. Maudhuit and T. Soames, Changes In EU Merger Control: Part 2, E.C.L.R., 2005, 26(2), 75-82, pp. 75-76.

Furthermore, it was submitted that the dominance test was not capable to take into account all relevant economic principles in the appraisal of mergers, since it was a legal test without any direct equivalent in economics¹¹. Also, it was claimed that the dominance standard led the Commission and the Courts to place an excessive emphasis on the structural characteristics of the relevant market in the analysis of concentrations, at the expense of an examination revolving around the behaviour of the firms post-merger¹². Additionally, it was argued that the dominance test did not focus on the effects of a merger on competition, because it was not suitable to evaluate potential efficiencies generated by a merger and accordingly it was not capable to weigh the pro-competitive as opposed to the anticompetitive effects of a concentration on the relevant market¹³. On the contrary, it was considered that the implementation of the substantial lessening of competition standard would enhance the Commission's and the Courts' ability to undertake a more economic analysis, it would better accommodate an effects-based approach and it would also emphasize on the post-merger behaviour of the firms¹⁴.

Another assertion supporting the change of the substantive test centred on the issue that the wording of the dominance standard under the Merger Regulation 4064/89 was

¹¹ M. Litzell, above note 1, p. 40 and L. Roller and M. De La Mano, The Impact Of The New Substantive Test In European Merger Control, E.C.J., 2006, 2(1), 9-28, p. 11.

¹² U. Immenga, above note 5, p. 443, P. Lowe, The Substantive Standard For Merger Control And The Treatment Of Efficiencies In Merger Analysis: An EU Perspective, Fordham Annual Antitrust Conference, 2002, available at http://ec.europa.eu/competition/speeches/text/sp2002_039_en.pdf, 1-13, p. 2 and K. Fountoukakos and S. Ryan, above note 1, pp. 283-284.

¹³ G. Stirati, above note 9, p. 256 and White and Case, above note 3, p. 7.

¹⁴ I. Kokkoris, The Reform Of The European Control Merger Regulation In The Aftermath Of The *Airtours* Case - The Eagerly Expected Debate: SLC v. Dominance Test, E.C.L.R., 2005, 26(1), 37-47, p. 43.

identical with the abuse of dominance standard under Article 102¹⁵. This overlap was considered possible to result in spill-over effects, i.e. the risk that a flexible and expansive interpretation of the dominance standard in mergers could lead to a similarly wide interpretation of dominance under Article 102¹⁶. Conversely, the adoption of the substantial lessening of competition would sever the overlap between the substantive standard for merger appraisal and the abuse of dominance standard under Article 102¹⁷.

Also, an important consideration in favour of the adoption of the substantial lessening of competition test was related to the desirability to align the EU merger appraisal test with that applied in other major jurisdictions such as the US¹⁸. Specifically, it was considered that the adoption of a similar substantive test and its interpretation in a harmonised manner would lead to a high degree of global convergence in the evaluation of concentrations¹⁹.

Overall, both substantive tests encompassed positive and negative features in their respective framework for the exercise of merger appraisal and this is logical as it would be impossible to find a perfectly suitable solution in such complex cases involving the

¹⁵ Z. Biro and D. Parker, A New EC Merger Test? Dominance v. Substantial Lessening Of Competition, *Comp. Law*, 2002, 1, 157-166, pp. 161 and 164.

¹⁶ V. Selvam, above note 7, p. 60, No Cited Author, above note 9, p. 23, M. Monti, Merger Control In The European Union: A Radical Reform, 2002, available at <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/02/545&format=HTML&aged=0&language=EN&guiLanguage=en>, 1-11, p. 4 and S. Volcker, Mind The Gap: Unilateral Effects Analysis Arrives In EC Merger Control, *E.C.L.R.*, 2004, 25(7), 395-409, pp. 401-402.

¹⁷ I. Kokkoris, above note 14, p. 43 and Z. Biro and D. Parker, above note 15, p. 165.

¹⁸ U. Immenga, above note 5, p. 442.

¹⁹ V. Selvam, above note 7, p. 65, I. Kokkoris, above note 14, p. 43 and P. Lowe, above note 12, p. 3.

prospective effects of concentrations on competition and especially in collective dominance cases where oligopoly theory is inherently problematic. Nevertheless, the final choice of the significant impediment to effective competition test, which was adopted under the Merger Regulation 139/2004, seems well placed to take into account the concerns set out above.

(4) The Commission's Proposal For Horizontal Merger Guidelines

The Commission also proposed to issue Guidelines in order to clarify its approach on the assessment of horizontal mergers²⁰. In contrast to the reaction on the proposed change of the substantive test, there was unanimous recognition of the need to introduce Guidelines for the analysis of horizontal concentrations. Accordingly, the Horizontal Merger Guidelines were welcomed as a move towards greater transparency in EU Merger Control, since they would help the understanding of the Commission's practice and method of investigation.

(C) THE SIGNIFICANT IMPEDIMENT TO EFFECTIVE COMPETITION TEST

(1) Introduction

The Merger Regulation 139/2004 introduces in Articles 2(2) and 2(3) the new substantive test for the appraisal of concentrations that focuses on the question of whether a merger would 'significantly impede effective competition' and replaces the previous test contained in Articles 2(2) and 2(3) of the Merger Regulation 4064/89 which was based on the examination of whether a merger would 'create or strengthen a dominant position'²¹. The

²⁰ N. Reed and P. Camesasca, above note 1, p. 458.

²¹ Freshfields Bruckhaus Deringer, New EC Merger Regime: A Director's Overview, 2004, available at <http://www.freshfields.com/publications/pdfs/practices/8289.pdf> (last visited 13/01/2009), 1-2, p. 1, J. Vickers, Merger Policy In Europe: Retrospect And Prospect, E.C.L.R., 2004, 25(7), 455-463, p. 455 and T. Soames, All

new substantive test represents a compromise solution, as it contains elements of both the ‘dominance’ and the ‘substantial lessening of competition’ tests²². Specifically, the ‘significant impediment to effective competition’ test is linguistically similar and embodies the essence of the ‘substantial lessening of competition’ standard, while the new merger appraisal test also retains the ‘dominance’ part of the old standard and accordingly it provides for a form of cohabitation between these standards²³.

The decision to replace the dominance test and to adopt the significant impediment to effective competition test produces important effects on the assessment of concentrations for the likelihood to create or strengthen a collective dominant position. In particular, the new substantive test alters the form of the appraisal undertaken in concentrations, it strengthens the substance of the analysis employed in the examination of collective dominance merger cases and it results in important policy implications.

(2) Issues Of Formation - Dominance v. Significant Impediment To Effective Competition

Change: The New World After 1 May 2004, 2004, available at http://www.martindale.com/antitrust-trade-regulation-law/article_Howrey-LLP_71546.htm, 1-5, p. 2.

²² I. Kokkoris, above note 1, p. 250 and Kilpatrick Stockton LLP, Antitrust Legal Alert - The New Test Adopted For European Union Merger Review, 2003, available at http://www.martindale.com/members/Article_Atachment.aspx?od=305497&id=50966&filename=asr-50968.pdf, 1-2, p. 1.

²³ M. Egge et al., above note 5, p. 21, M. Walker, The New Merger Regulation And Horizontal Merger Guidelines: Will They Make A Difference?, available at http://www.crai.com/uploadedFiles/RELATING_MATERIALS/Publications/Consultant_publications/files/pub_4117.pdf, 1-4, p. 1 and G. Stirati, above note 9, pp. 253-254.

The new substantive test amends the wording of the old test by simply reversing its phrasing. Nevertheless, this modification is not merely a semantic change of trivial importance, but instead it highly affects the form of the appraisal undertaken in mergers.

(I) The Dominance Test

The dominance test under the Merger Regulation 4064/89 entailed a cumulative two-stage analysis for the assessment of the incompatibility of a concentration with the Common Market²⁴. Specifically, under the old test the Commission was required to establish firstly that the merger ‘created or strengthened a dominant position’ and secondly that it resulted in a ‘significant impediment to effective competition’²⁵. Additionally, a causal link between the first and the second limbs had to be demonstrated and this was evident from the wording of the test which directly linked the two elements by the phrase ‘as a result of which’²⁶.

Under the old test the focus was primarily shed on the dominance limb, since without the requirement of dominance being met, the Commission would not rely exclusively on the significant impediment to effective competition limb in order to challenge a merger and

²⁴ This two-stage analysis was evident by the wording of Article 2(3) of the Merger Regulation 4064/89, which provided that ‘a concentration which creates or strengthens a dominant position as a result of which effective competition would be significantly impeded in the common market or in a substantial part of it shall be declared incompatible with the Common Market’. See also, L. Roller and M. De La Mano, above note 11, pp. 10, 11 and 13 and V. Selvam, above note 7, p. 53.

²⁵ *Airtours* para. 58. See also, K. Fountoukakos and S. Ryan, above note 1, pp. 280 and 288 and No Cited Author, above note 9, p. 22.

²⁶ R. Thompson, Goodbye To ‘The Dominance Test’? Substantive Appraisal Under The New UK And EC Merger Regimes, *Comp. Law*, 2003, 332-346, p. 335.

consequently it only prohibited concentrations that created or reinforced dominance²⁷. Thus, a finding of dominance was a necessary condition for the prohibition of a merger, but in principle it was not in itself sufficient, because a dominant firm would not necessarily lead to a significant impediment to effective competition²⁸. Nonetheless, in practice and despite the relative importance which the Commission attributed to the second limb of the test, often it neglected it and maintained that it was sufficient to prove the first limb to also have proven the second limb, i.e. in a number of cases it was presumed that a significant impediment to effective competition would automatically result from the establishment of the creation or the strengthening of a dominant position²⁹. Effectively, this meant that the two limbs of the Merger Regulation 4064/89 substantive test did not carry equal weights, but the requirement of ‘dominance’ preceded in importance in relation to the ‘significant impediment to effective competition’.

(II) The Significant Impediment To Effective Competition Test

²⁷ K. Tomczykiewicz, *Assessing The European Community’s Merger Regulations*, 2007, available at <http://www.lepanoptique.com/sections/politique-economie/assessing-the-european-community%E2%80%99s-merger-regulations/>, 1-4, p. 2.

²⁸ *Aerospatiale-Alenia/De Havilland* (Case IV/M.53 [1991], OJ L334/42 [1991], 4 CMLR M2 [1992]) para. 53. See also, L. Roller and M. De La Mano, above note 11, p. 13 and M. Motta, above note 9, p. 202.

²⁹ A. Renckens, *Welfare Standards, Substantive Tests And Efficiency Considerations In Merger Policy: Defining The Efficiency Defence*, J.C.L.&E., 2007, 3(2), 149-179, p. 165, G. Monti, *The New Substantive Test In The EC Merger Regulation – Bridging The Gap Between Economics And Law?*, LSE Law, Society And Economy Working Papers, 2008, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1153661, 1-21, p. 3, J. Basedow, *The Modernization Of European Competition Law: A Story Of Unfinished Concepts*, Texas International Law Journal, 2006-2007, 42, 429-439, p. 433, EU Committee Of The American Chamber Of Commerce In Belgium, above note 4, p. 7 and U. Denzel, above note 2, p. 18.

The Merger Regulation 139/2004 substantive test contains the same two limbs as the old test, but the second limb of the old Articles 2(2) and 2(3) is now the principal criterion in the form of a ‘significant impediment to effective competition’, while ‘dominance’ is only the prime example of such a situation³⁰. Specifically, by adding the words ‘in particular’ before the ‘dominance’ limb the new substantive test envisages the creation or the strengthening of a dominant position as the primary paradigm where a significant impediment to effective competition would result³¹. This essentially transforms the previous two-limb test into a unified standard that contains a single necessary and sufficient condition for incompatibility, i.e. whether the merger would significantly impede effective competition³². Accordingly, the establishment of a dominant position is no longer a necessary requirement for a prohibition decision and even though the new substantive test incorporates the dominance paradigm, it is not limited to it, since a merger that does not satisfy the dominance requirement can still be prohibited under the significant impediment to effective competition standard³³. It follows that there is no longer a necessity to establish a causal link in all cases.

³⁰ Article 2(3) of the Merger Regulation 139/2004 provides that ‘a concentration which would significantly impede effective competition, in the common market or in a substantial part of it, in particular as a result of the creation or strengthening of a dominant position, shall be declared incompatible with the Common Market’. See also, B. Fernandez, I. Hashi and M. Jegers, *The Implementation Of The European Commission's Merger Regulation 2004: An Empirical Analysis*, J.C.L.&E., 2008, 4(3), 791-809, p. 793, I. Kokkoris, above note 14, p. 44, A. Riesenkauff, above note 8, p. 716, A. Christiansen, *The Reform Of EU Merger Control – Fundamental Reversal Or Mere Refinement?*, 2006, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=898845, 1-60, p. 20, J. Basedow, above note 29, p. 434 and G. Stirati, above note 9, p. 254.

³¹ Horizontal Merger Guidelines para. 2.

³² L. Roller and M. De La Mano, above note 11, p. 16.

³³ K. Fountoukakos and S. Ryan, above note 1, p. 288, J. Basedow, above note 29, p. 434, S. Voigt and A. Schmidt, *The Commission's Guidelines On Horizontal Mergers: Improvement Or Deterioration?*, C.M.L.R., 2004, 41, 1583-1594, p. 1585 and Kilpatrick Stockton LLP, above note 22, p. 2.

Thus, the position under the substantive test of the Merger Regulation 139/2004 is as follows. On the one hand, the Commission may prohibit a merger by proving ‘directly’ that it would significantly impede effective competition without proof of dominance or a causal link between them. On the other hand, the Commission may ‘indirectly’ demonstrate the incompatibility of a concentration with the Common Market by establishing that it creates or strengthens a dominant position which would significantly impede effective competition and in such a situation a causal link must be shown³⁴.

(3) Issues Of Substance - Collective Dominance Under The New Substantive Test

The significant impediment to effective competition test successfully addresses and resolves most of the concerns that were related to the dominance test and it reinforces the substantive analysis employed in collective dominance merger cases. In particular, the new substantive test, in conjunction with its interpretation in the Horizontal Merger Guidelines, introduces the assessment of unilateral effects in EU Merger Control and formally includes coordinated effects within the boundaries of application of the Merger Regulation 139/2004, it verifies the shift towards a more economic and effects-based approach in the analysis of collective dominance cases, while it also retains the past collective dominance precedent.

(I) Coordinated And Unilateral Effects

A fundamental change induced by the Merger Regulation 139/2004 centres on the fact that, while the old merger appraisal standard did not explicitly address collective dominance concerns, the analysis of such anticompetitive positions is now formally included within the ambit of application of the new substantive test. Specifically, collective dominance was

³⁴ G. Monti, above note 29, p. 4 and K. Fountoukakos and S. Ryan, above note 1, p. 290.

brought within the boundaries of the Merger Regulation 4064/89 by a teleological interpretation of the dominance test, but it was not formally included within its provisions³⁵. Conversely, the significant impediment to effective competition test, as explained at Recital 25 of the Merger Regulation 139/2004 and the Horizontal Merger Guidelines, not only verifies the understanding that the concept of collective dominance and the theory of coordinated effects reflect each other, but also it recognises the fact that coordinated effects form a valid theory of harm in EU Merger Control³⁶. Additionally, the new merger appraisal test closes the gap contained in the scope of application of the old substantive test by removing the strict necessity to prove dominance, which in turn gives to the Commission a firm legal basis to assess the unilateral effects of concentrations³⁷. In order to clarify this point, Recital 25 of the Merger Regulation 139/2004 expressly includes unilateral effects within the boundaries of application of the new substantive test³⁸.

Accordingly, the new substantive test, as explained in the Horizontal Merger Guidelines, acknowledges that unilateral and coordinated effects are the main and only

³⁵ Note also the discussion on the inclusion of collective dominance within the boundaries of application of the Merger Regulation 4064/89 at Ch. 4.

³⁶ Horizontal Merger Guidelines paras 22 and 39.

³⁷ L. Roller and M. De La Mano, above note 11, p. 9, M. Egge et al., above note 5, p. 17, S. Baxter and F. Dethmers, *Unilateral Effects Under The European Merger Regulation: How Big Is The Gap?*, E.C.L.R., 2005, 26(7), 380-389, p. 380 and A. Zutven and H. Urlus, *Greenberg Traurig LLP Client Alert - New EU Merger Regulation And Reform Of EC Antitrust Enforcement*, 2004, available at http://www2.gtlaw.com/pub/Alerts/2004/vanzutvena_06.asp, 1-6, p. 3.

³⁸ Recital 25 of the Merger Regulation 139/2004 explains that 'the notion of 'significant impediment to effective competition' should be interpreted as extending, beyond dominance, only to the anticompetitive effects of a concentration resulting from the non-coordinated behaviour of undertakings which would not have a dominant position on the market concerned'.

theories of harm in EU Merger Control and this recognition gives to the Commission a firm ability to regulate all possible anticompetitive effects which may result from horizontal concentrations³⁹. Moreover, the new merger appraisal test, as interpreted in the Horizontal Merger Guidelines, inserts a clear distinction between coordinated and unilateral effects as these anticompetitive theories reflect differing situations and circumstances⁴⁰.

(II) The More Economic And Effects-Based Approach

The significant impediment to effective competition standard is directly rooted in economic theories and accordingly it leads the Commission to take economic factors into account in the examination of concentrations⁴¹. Thus, the Merger Regulation 139/2004 test shifts the emphasis from the former more legalistic approach under the dominance standard to an analysis which is in accordance with contemporary economic thinking, i.e. the ‘more economic approach’⁴². The more economic approach was a necessary step forward in the assessment of collective dominance in mergers, since the GC in *Airtours* harmonized the requirements for the establishment of such an anticompetitive position with economics and

³⁹ Horizontal Merger Guidelines para. 22. See also, K. Fountoukakos and S. Ryan, above note 1, pp. 277, 288 and 290, I. Kokkoris, above note 14, p. 44, M. Egge et al., above note 5, p. 26 and ICN Merger Working Group, Project On Merger Guidelines, Report For The Third ICN Annual Conference In Seoul, 2004, available at <http://www.internationalcompetitionnetwork.org/uploads/library/doc488.pdf>, 1-19, p. 8.

⁴⁰ Horizontal Merger Guidelines para. 22.

⁴¹ B. Fernandez et al., above note 30, pp. 791, 793 and 794, I. Kokkoris, above note 1, p. 250, J. Basedow, above note 29, p. 433 and E. Damme and J. Pinkse, Merger Simulation Analysis: An Academic Perspective, 2005, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=869737, 1-14, p. 2.

⁴² A. Christiansen, above note 30, p. 27, G. Monti, above note 29, pp. 10-11 and G. Stirati, above note 9, p. 250.

this analytical methodology needed legislative authority in order to be cemented⁴³. This is achieved by the introduction of the new merger appraisal standard and its analysis in the Horizontal Merger Guidelines, which brings the concept of collective dominance fully in line with the economic theory of tacit collusion.

The new substantive test also leads the Commission to scrutinize the effects of mergers on competition. Specifically, in order to assess whether a ‘significant impediment to effective competition’ may arise as a result of the concentration under investigation, the Commission must perform an effects-based analysis and weigh the anticompetitive as opposed to the pro-competitive effects of the merger⁴⁴. In that context, the analytical framework established under the new substantive test integrates the consideration of efficiencies in the appraisal of concentrations and this development constitutes an advancement in relation to the treatment of efficiencies under the dominance standard. In particular, under the dominance test the Commission consistently dismissed the notifying parties’ claims to rely on efficiencies arguments in order to counterbalance the anticompetitive effects of proposed mergers and, what is more, sometimes efficiencies appeared to count against a concentration as an offence⁴⁵. Conversely, the Merger Regulation

⁴³ Note also the discussion on the *Airtours* judgment where the Court adopted a more economic approach at Ch. 4.

⁴⁴ G. Monti, above note 29, p. 10, M. Walker, above note 23, p. 2, L. Roller and M. De La Mano, above note 11, p. 20, K. Tomczykiewicz, above note 27, p. 3 and K. Fountoukakos and S. Ryan, above note 1, pp. 288-289.

⁴⁵ For example, in *General Electric/Honeywell* (Case COMP/M.2220 [2001], OJ L48/01 [2004]) the Commission held that cost efficiencies resulting from the concentration would reinforce the dominant position of the merged entity. Also, in *AT&T/NCR* (Case IV/M.50 [1991]) para. 30 the Commission examined whether advantages flowing from synergies would lead to a dominant position. Lastly, in *Aérospatiale-Alenia/DeHavilland* paras 65-71 cost savings were considered to count against the materialisation of the merger.

139/2004 explicitly acknowledges the role of efficiencies arguments in the assessment of mergers⁴⁶. Thus, Article 2(1)(b) along with Recital 29 of the Merger Regulation 139/2004 form the basis of the efficiencies defence in EU Merger Control and introduce the understanding that efficiencies should be taken into account in the appraisal of concentrations provided that they produce benefits to the consumers⁴⁷.

See also U. Immenga, above note 5, p. 447, J. Davies, R. Schlossberg, M. Jaspers and K. Scholomiti, *Efficiencies – A Changing Horizon In Horizontal Merger Control*, 2007, available at http://www.gettingthedealthrough.com/narrative_pdf.php?id=11 (last visited 04/12/2010), 3-13, p. 4, M. Motta, above note 9, p. 203, EU Committee Of The American Chamber Of Commerce In Belgium, above note 4, p. 7, ICC, *Comments On European Commission Draft Notice On The Appraisal Of Horizontal Mergers*, 2003, available at <http://www.iccwbo.org/Advocacy-Codes-and-Rules/Document-centre/2003/Comments-on-European-Commission-Draft-Notice-on-the-Appraisal-of-Horizontal-Mergers/>, 1-11, p. 8, U. Denzel, above note 2, pp. 20 and 22, M. Walker, *Have The Economic Approaches To Merger Control In The EC And US Converged?*, ICGL To Merger Control, 2005, available at http://www.crai.com/uploadedFiles/RELATING_MATERIALS/Publications/Consultant_publications/files/pub_4104.pdf, 20-24, p. 23 and Wilmer, Cutler and Pickering, *European Commission Adopts Merger Control Reform Package*, 2002, available at <http://www.wilmerhale.com/files/Publication/7178d077-068a-4bd2-9976-cb2dcf73db4d/Presentation/PublicationAttachment/bef3d442-7bcc-48a2-99a9-50a85b9c7490/ACFD854.pdf>, 1-6, p. 4.

⁴⁶ L. Roller and M. De La Mano, above note 11, p. 17 and A. Renckens, above note 29, p. 166.

⁴⁷ Article 2(1)(b) provides that in the analysis of concentrations the Commission ‘shall take into account the development of technical and economic progress provided that it is to consumers' advantage and does not form an obstacle to competition’. Also, Recital 29 states that it ‘is possible that the efficiencies brought about by a concentration counteract the effects on competition and in particular the potential harm to consumers’. Note also the discussion on efficiencies at Ch. 4. See also, A. Christiansen, above note 30, p. 25, J. Basedow, above note 29, p. 435 and N. Reed and P. Camesasca, above note 1, p. 461.

Lastly, the more economic approach advocated by the new substantive test, directs the Commission to divert from an examination based purely on structural indicators and to analyse in a dynamic context a blend of structural factors and behavioural incentives in order to assess the likelihood of coordinated effects post-merger, thereby essentially verifying the analysis employed by the GC in *Airtours*⁴⁸.

(III) Past Precedent And Spill-Over Effects

The new merger appraisal test resolves the problem revolving around the validity of the pre-Merger Regulation 139/2004 collective dominance decisions by preserving such precedent⁴⁹. In particular, the fact that dominance forms the prime example of a significant impediment to effective competition ensures the continued validity of past precedent as guidance to future decisions and such a position is expressly affirmed by Recital 26 of the Merger Regulation 139/2004⁵⁰. Indeed, in its post-Merger Regulation 139/2004 decisions the Commission follows the past precedent and this was clearly demonstrated in *ABF/GBI* where it applied the *Airtours* and *Sony* judgments, which were decided under the dominance standard, in a coordinated effects examination under the new substantive test⁵¹.

However, the new substantive test does not firmly resolve the potential spill-over effects problem between collective dominance under the Merger Regulation 139/2004 and

⁴⁸ Note also the discussion on the GC's focus in *Airtours* on a mixture of structural conditions and behavioural incentives at Ch. 4. See also, A. Weitbrecht, EU Merger Control In 2006 - The Year In Review, E.C.L.R., 2007, 28(2), 125-133, p. 126.

⁴⁹ K. Fountoukakos and S. Ryan, above note 1, p. 291.

⁵⁰ Recital 26 of the Merger Regulation 139/2004 refers to the preservation of 'the guidance that may be drawn from past judgments of the European Courts and Commission decisions pursuant to Regulation 4064/89'.

⁵¹ *ABF/GBI* paras 141-145.

the abuse of collective dominance under Article 102. In principle, the substantive test under the Merger Regulation 139/2004 appears to avoid confusion with the wording of the prohibition under Article 102, since the assessment of concentrations would be based on the significant impediment to effective competition standard and accordingly such an appraisal would not be linked with any interpretations of dominance given by the Courts in cases falling within the ambit of Article 102⁵². Nonetheless, it seems that the dominance paradigm contained in the Merger Regulation 139/2004 substantive test will continue to play an influential role in the assessment of collective dominance merger cases and accordingly there is an on-going link with the Article 102 collective dominance standard, i.e. there is not a complete detachment between the respective standards applied under each legal provision⁵³.

(4) Issues Of Policy – Effects Of The Merger Regulation 139/2004 Substantive Test

The amendment of the substantive test under the Merger Regulation 139/2004 produces important policy implications, as it alters the threshold of intervention applicable in horizontal concentrations, it influences the significance attributed to unilateral as opposed to coordinated effects and it affects the enforcement policy in mergers, whilst in this later context remedies enjoy a prominent role.

(I) The Intervention Threshold

⁵² I. Kokkoris, above note 14, p. 44.

⁵³ This view is in accordance with the Horizontal Merger Guidelines para. 4 which asserts that the concept of dominance ‘provides an important indication as to the standard of competitive harm that is applicable when determining whether a concentration is likely to impede effective competition to a significant degree’.

An important policy issue revolves around the question of whether the change of the substantive test modifies the intervention threshold applied in horizontal mergers assessed for the likelihood of resulting in unilateral or coordinated effects.

Unilateral Effects

The amendment of the substantive test leads to a lowering of the intervention threshold applicable in horizontal mergers, as it introduces greater flexibility in establishing incompatibility. Such flexibility emerges from the fact that the new substantive test gives to the Commission the ability to regulate the unilateral effects ‘gap’ cases and challenge mergers at levels of market shares below the traditional threshold required for a finding of single firm dominance, since the Commission may ‘directly’ demonstrate the incompatibility of a concentration by focusing on the establishment of the sole condition of a significant impediment to effective competition instead of the old more demanding test which additionally required the proof of dominance⁵⁴. Thus, the intervention threshold is lower under the new substantive test, because the elimination of the necessity to establish dominance introduces the unilateral effects theory of harm in the assessment of horizontal mergers and opens the way for the Commission’s intervention to a significantly larger number of concentrations, i.e. those concentrations which could not be challenged under the dominance test as they fell within the ‘gap’ of such a standard⁵⁵.

⁵⁴ Note also the discussion on the relationship between the unilateral effects theory of harm and the concept of single firm dominance at Ch. 7. See also, M. Walker, above note 23, p. 2 and D. Ridyard, The Commission’s New Horizontal Merger Guidelines - An Economic Commentary, 2005, available at <http://www.coleurope.eu/content/gclc/documents/GCLC%20WP%2002-05.pdf>, 1-13, p. 2.

⁵⁵ Note that, for the reasons stated, such a position holds firm despite the fact that Recital 26 of the Merger Regulation 139/2004 refers to the maintenance of ‘consistency with the standards of competitive harm which have been applied by the Commission and the Community Courts regarding the compatibility of a concentration

Coordinated Effects

The lowering of the intervention threshold under the amended substantive test is exclusively attributed to the inclusion of the unilateral effects theory of harm in the assessment of horizontal mergers and specifically to the ability conferred on the Commission to regulate the ‘gap’ cases by ‘directly’ proving the incompatibility of a concentration. On the contrary, despite the amendment of the substantive test, the threshold of intervention applicable in horizontal mergers assessed for the likelihood of coordinated effects remains unaltered and this position holds firm irrespective of whether the Commission would rely on the ‘direct’ or the ‘indirect’ demonstration of incompatibility of a concentration.

In the examination of coordinated effects cases the Commission may ‘indirectly’ prove the incompatibility of a notified merger with the Common Market⁵⁶. The ability to indirectly demonstrate the incompatibility of a concentration under the Merger Regulation 139/2004 illustrates that the introduction of the new substantive test does not alter the validity of the analytical model in terms of dominance as developed under the Merger Regulation 4064/89⁵⁷. In particular, dominance is still a feature of the new merger appraisal test, since it forms the principal example of a significant impediment to effective competition, and accordingly the applicability of the dominance analytical model in the assessment of concentrations has been preserved. Such a position is expressly affirmed by the Horizontal

with the Common Market’. See also, S. Bishop and D. Ridyard, *Prometheus Unbound: Increasing The Scope For Intervention In EC Merger Control*, E.C.L.R., 2003, 24(8), 357-363, p. 360, S. Voigt and A. Schmidt, above note 33, pp. 1583 and 1585, H. Kuhnert, *Widening The Gap – The Impact Of The T-Mobile/tele.ring Decision*, C.L.I., 2007, January, 9-10, p. 9 and D. Ridyard, above note 54, pp. 4-5.

⁵⁶ Note also the earlier discussion on the ‘indirect’ proof of incompatibility at this Chapter.

⁵⁷ L. Roller and M. De La Mano, above note 11, pp. 10 and 27 and K. Tomczykiewicz, above note 27, pp. 2-3.

Merger Guidelines which place an increased emphasis on the dominance paradigm, since paragraph 4 provides that ‘most cases of incompatibility will continue to be based on a finding of dominance’⁵⁸. Therefore, in the situation where the Commission would rely on the ‘indirect’ demonstration of incompatibility in concentrations analysed for the likelihood of coordinated effects under the Merger Regulation 139/2004 substantive standard, the threshold for intervention would remain unaltered.

In *ABF/GBI* the Commission sought to ‘directly’ prove the incompatibility of the concentration on the basis of coordinated effects, as it focused exclusively on the establishment of the significant impediment to effective competition condition under the Merger Regulation 139/2004 substantive test⁵⁹. Nevertheless, the ‘direct’ proof of incompatibility has different impact on the intervention threshold employed in horizontal mergers examined for coordinated as opposed to unilateral effects. Specifically, the applicability of the ‘direct’ proof of incompatibility regulates the unilateral effects ‘gap’ cases that fall below the standards required to establish single firm dominance under the old merger appraisal test and accordingly it lowers the intervention threshold. Conversely, the reliance on the ‘direct’ proof of incompatibility in coordinated effects cases does not lower the intervention threshold, because there is no ‘gap’ between the regulatory boundaries of the concept of collective dominance as developed under the dominance test and the theory of coordinated effects as analysed in the Horizontal Merger Guidelines under the new

⁵⁸ The validity of the dominance model of analysis is also illustrated by Recital 25 of the Merger Regulation 139/2004, which states that the significant impediment to effective competition standard comprises ‘dominance’ cases and ‘non-coordinated effects’ cases within its ambit.

⁵⁹ *ABF/GBI* paras 144 and 146.

substantive test, but on the contrary they closely correspond to each other⁶⁰. This position is underpinned by the fact that in *ABF/GBI* the Commission's analysis of coordinated effects under the significant impediment to effective competition test was heavily based on the substantive assessment and the legal requirements employed in the examination of collective dominance cases under the dominance standard, i.e. the *Airtours* criteria and the *Sony* hypothetical mechanism of coordination⁶¹. Thus, in the situation where the Commission would rely on the 'direct' demonstration of incompatibility in coordinated effects cases examined under the Merger Regulation 139/2004 substantive test, there would be no lowering of the intervention threshold.

(II) A Predominant Theory Of Harm?

A policy implication resulting from the amendment of the substantive test and the introduction of unilateral effects in EU Merger Control relates to the Commission's tendency to principally rely on such a theory of harm in order to appraise the likelihood of anticompetitive effects resulting from horizontal concentrations. On the contrary, the Commission's incentive to challenge horizontal mergers on the ground of coordinated effects has been reduced and this is demonstrated by the negligible intervention rate under such a theory of harm post-Merger Regulation 139/2004. As a policy matter, this tendency can be attributed to the fact that the intervention threshold applicable in mergers assessed for unilateral effects is lower than the threshold applied in coordinated effects cases and accordingly the Commission would prefer to rely on the former theory of harm in order to

⁶⁰ Note also the discussion on the relationship between the concept of collective dominance and the coordinated effects theory of harm at Ch. 2 as well as the analysis of coordinated effects under the Horizontal Merger Guidelines later at this Chapter.

⁶¹ *ABF/GBI* paras 141-145.

successfully challenge a concentration⁶². Moreover, it seems that the problematic economic background of coordinated effects has resulted in their marginalization, since such a theory of harm appears less likely to lead to enforcement as compared to unilateral effects⁶³. This is illustrated by the fact that in unilateral effects the mechanism of harm is clear cut, whilst collusion based theories are complex⁶⁴. Furthermore, better and more accurate instruments for the examination of unilateral effects have been developed, as this is evident by the use of econometric models in the assessment of such a theory of harm, in contradiction to coordinated effects where these analytical methods are of limited, if any, assistance⁶⁵.

Nonetheless, the emergence of unilateral effects as a theory of anticompetitive harm in EU Merger Control has not diminished the significance of coordinated effects as an economic phenomenon centred on collusion in the particular circumstances of a case, i.e. concerns revolving around tacit collusion have not declined in importance. What is more, the legal framework for the assessment of coordinated effects has been reinforced by the introduction of the new substantive test and the Horizontal Merger Guidelines, which confirm that such a theory of harm forms an integral part of EU Merger Control and clarify the methodology as well as the factors relevant in its analysis. Therefore, despite the increased

⁶² S. Volcker, above note 16, p. 397 and S. Baxter and F. Dethmers, Collective Dominance Under EC Merger Control – After *Airtours* And The Introduction Of Unilateral Effects Is There Still A Future For Collective Dominance?, E.C.L.R., 2006, 27(3), 148-160, p. 159.

⁶³ S. Baxter and F. Dethmers, above note 62, p. 160 and M. Coate, Economic Models In Merger Analysis: A Case Study Of The Merger Guidelines, 2005, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=726515, 1-44, p. 30.

⁶⁴ Note also the discussion on the mechanism of harm under each anticompetitive theory at Ch. 7.

⁶⁵ Note also the discussion on the application of econometrics in the assessment of unilateral and coordinated effects at Ch. 7.

emphasis placed by the Commission on unilateral effects as a policy choice, in principle no theory of harm is predominant in EU Merger Control.

(III) Enforcement Policy Post-Merger Regulation 139/2004

Effective enforcement policy is essential in order to maintain an efficient EU Merger Control system. However, the analysis of the overall rate of prohibition and conditional clearance decisions in concentrations demonstrates a low level of intervention post-Merger Regulation 139/2004. Also, numerous considerations reveal that effective enforcement of the concept of collective dominance in horizontal mergers seems questionable.

The enforcement statistics before and after the introduction of the Merger Regulation 139/2004 substantive test demonstrate that during the period 1994-2003 on average 1% of the notified concentrations were prohibited, while the same proportion fell to 0,1% in the period 2004-2008⁶⁶. Also, in interventions including prohibition decisions, clearances with remedies in Phase II and Phase II withdrawals, the intervention rate has fallen between pre-2004 and post-2004 from 4.6% of all notified mergers to 2.2% respectively⁶⁷. Accordingly, since the

⁶⁶ For example, in 2002 and 2003 there were no prohibition decisions, while even the ‘record’ number of five prohibitions in 2001 amounted to only 1.7% of the annual decisions on concentrations. See also, European Commission XXXIInd Report On Competition Policy 2002, available at http://ec.europa.eu/competition/publications/annual_report/2002/en.pdf, 1-310, p. 65, European Commission XXXIIIrd Report On Competition Policy 2003, available at http://ec.europa.eu/competition/publications/annual_report/2003/en.pdf, 1-315, p. 65 and F. Maier-Rigaud and K. Parplies, EU Merger Control Five Years After The Introduction Of The SIEC Test: What Explains The Drop In Enforcement Activity?, E.C.L.R., 2009, 30(11), 565-579, p. 566.

⁶⁷ As an illustration, in 2004 only one out of seven Phase II investigations resulted in a prohibition decision, while four cases were approved subject to conditions. In 2005 there were no prohibition decisions and three

adoption of the new substantive test, the Commission has imposed conditions after a Phase II investigation in fewer cases on average than under the dominance standard and a significantly smaller percentage of notified concentrations has been prohibited⁶⁸. In that regard, the Commission has recognized that pre-Merger Regulation 139/2004 ‘outright prohibitions are relatively rare’, whilst post-Merger Regulation 139/2004 ‘the percentage of notified concentrations resulting in a prohibition decision remains modest’⁶⁹. Also, it should be highlighted that this drop in the percentage of intervention decisions is inconsistent with the assumption that the introduction of the analysis of unilateral effects in EU Merger Control under the new substantive test would lead to a higher degree of enforcement. Nevertheless, these statistics cannot automatically justify a conclusion pointing towards an ineffective enforcement policy post-Merger Regulation 139/2004, since this drop in the Commission’s intervention may be explainable by the implementation of the more accurate in results economics-based approach and the refinement of the analysis which has at its centre the effects of mergers on competition. Thus, even though it is evident that the overall percentage

conditional clearance decisions in Phase II. Finally, in 2006 there was no prohibition decision. See also, European Commission Report On Competition Policy 2004, Vol. 1, available at http://ec.europa.eu/competition/publications/annual_report/2004/en.pdf, 1-202, p. 65, European Commission Report On Competition Policy 2005, available at http://ec.europa.eu/competition/publications/annual_report/2005/en.pdf, 1-210, p. 89, European Commission Report On Competition Policy 2006, available at http://ec.europa.eu/competition/publications/annual_report/2006/en.pdf, 1-35, p. 14 and F. Maier-Rigaud and K. Parplies, above note 66, p. 568.

⁶⁸ J. Briones, A Balance Of The Impact Of Economic Analysis On The EU Competition Policy, *World Competition*, 2009, 32(1), 27-39, p. 29.

⁶⁹ European Commission Report On Competition Policy 2005, above note 67, p. 89 and A. Papaioannou, U. Diez, S. Ryan and D. Sjoblom, Green Paper On The Review Of The Merger Regulation, *Competition Policy Newsletter*, 2002, Vol. 1, 65-68, p. 65.

of intervention decisions has been marginalised post-Merger Regulation 139/2004, these results in themselves are inconclusive.

Nonetheless, a number of considerations point towards an insufficient enforcement of collective dominance in horizontal concentrations post-Merger Regulation 139/2004. Firstly, it should be emphasised that there has been no intervention decision on the basis of coordinated effects under the Merger Regulation 139/2004 substantive test, with the exception of *ABF/GBI*. Secondly, despite the fact that since 2006 the GC in *Impala* launched the indirect test and introduced a degree of flexibility in the establishment of the strict *Airtours* conditions, thereby widening the ability to enforce the concept of collective dominance in mergers, the Commission has not yet relied on that test in order to examine a coordinated effects case, i.e. enforcement is still lacking in order to fully apply such an analysis in practice. Thirdly, the lack of precedent tackling tacit collusion under Article 102 and the absence of provisions controlling the abuse of collective dominance in the Guidance Paper, generate an imperative need to strengthen the applicability of collective dominance under the Merger Regulation in order to effectively regulate tacit collusive conduct within the EU Competition Law framework and this is in contradiction with the minimal enforcement of such a concept in horizontal concentrations⁷⁰.

The limited enforcement of collective dominance post-Merger Regulation 139/2004 is to some extent explainable by the difficulties rooted on the imperfect economic understanding as related to the inconclusiveness of game theory which creates complications

⁷⁰ Note also the discussion on the focus of the Article 102 precedent on the abusive conduct of explicitly colluding firms and the absence of provisions for the analysis of the abuse of collective dominance in the Guidance Paper at Ch. 6.

on the regulation of coordination and by the fact that the threshold for intervention in concentrations examined for coordinated effects is high. However, the arguments set out above, and particularly the non-application of the *Impala* indirect test, highlight not only a limited, but primarily an insufficient enforcement policy that points towards the conclusion of possible under-enforcement of collective dominance in horizontal concentrations post-Merger Regulation 139/2004.

(IV) Remedies

As a policy choice, the Commission has gradually attributed an increased role to remedies in merger review and this is evident by the fact that both pre- but mostly post-Merger Regulation 139/2004 the number of cases in which a concentration was cleared subject to remedies has been much higher than the number of prohibition decisions⁷¹. The legal basis for the acceptance of remedies as a means to eliminate anticompetitive problems is contained in Articles 6(2) and 8(2) along with Recital 30 of the Merger Regulation 139/2004, while the Merger Remedies Notice provides a detailed guidance on the types of commitments which are considered acceptable to resolve anticompetitive concerns and reflects the recommendations of the Merger Remedies Study that carried out a detailed ex-post review on the effectiveness of various types of commitments⁷². However, the issue of remedies directed

⁷¹ H. Vasconcelos, Efficiency Gains And Structural Remedies In Merger Control, J.Ind.Econ., 2010, 742-766, p. 760 and P. Ormosi, Determinants Of The Success Of Remedy Offers: Evidence From European Community Mergers, CCP Working Paper 09-11, 2009, available at http://www.uea.ac.uk/polopoly_fs/1.138543!ccp09-11.pdf, 1-43, p. 3.

⁷² Commission Notice On Remedies Acceptable Under Council Regulation (EC) No 139/2004, ([2008], OJ C267/1 [2008]), available at http://ec.europa.eu/competition/mergers/legislation/files_remedies/remedies_notice_en.pdf and Merger Remedies Study, 2005, available at http://ec.europa.eu/competition/mergers/legislation/remedies_study.pdf.

to solve coordinated effects concerns in horizontal concentrations is characterised by the lack of any provision in the relevant legislative instruments which specifically focuses on the type of commitments required to eliminate the risk of tacit collusion post-merger. Thus, the framework of remedies applicable in coordinated effects cases is provided by the general principles and provisions that underpin the totality of merger remedies as well as by the relevant case precedent.

General Principles

Merger remedies are underlined by a number of fundamental principles. Specifically, in the appraisal of remedies the Commission must take into account the principle of proportionality between the intensity of the remedy and the competition problem that it intends to solve in order to avoid the risk of underfixing, i.e. where the commitments fail to successfully eliminate the anticompetitive concerns, or overfixing, i.e. where the remedy is wider than necessary⁷³. Furthermore, in principle the objective of remedies is to restore the level of competition that prevailed in the relevant market before the concentration and not to enhance pre-merger competition as this would lead to overfixing⁷⁴. Moreover, the

⁷³ Recital 30 Merger Regulation 139/2004 and Merger Remedies Notice para. 85. See also, F. Louis, New EU Commission Notice On Remedies In Merger Cases, 2008, available at <http://www.wilmerhale.com/pages/publicationsandnewsdetail.aspx?NewsPubId=92920>, 1-7, p. 2 and T. Sullivan, Antitrust Remedies In The U.S. And EU: Advancing A Standard Of Proportionality, The Antitrust Bulletin, 2003, Summer, 377-425, pp. 414 and 424.

⁷⁴ P. Papandropoulos and A. Tajana, The Merger Remedies Study – In Divestiture We Trust?, E.C.L.R., 2006, 27(8), 443-454, p. 450, S. Davis and B. Lyons, *Mergers And Merger Remedies In The EU – Assessing The Consequences For Competition*, Elgar, First Edition, 2007, p. 34 and P. Këllezi and C. Rapin, Merger Remedies And Competition Law: An Overview Of EU And National Case Law, 2012, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2014636, 1-12, p. 5.

commitments must be effective and capable to eliminate entirely the anticompetitive concerns arising from the concentration under investigation⁷⁵. Lastly, there is no specific type of remedy that would be applicable in each and every case and accordingly the suitability of commitments must be considered on a case-by-case basis by taking into account the context of the market, the nature of the merger under scrutiny and the theory of harm arising from the concentration⁷⁶.

The Commission must fulfil the *Airtours* criteria in order to establish a coordinated effects theory of harm in horizontal mergers. It follows that in the situation where the Commission proves that the concentration would create or reinforce a situation of tacit collusion post-merger, the proposed remedy must be capable to ‘eliminate entirely’ the coordinated effects concerns raised by the concentration and this would be accomplished by cancelling at least one of the *Airtours* conditions. In particular, the cumulative and necessary nature of the *Airtours* conditions dictates that a remedy directed towards the cancellation of only one of those criteria would suffice, even though it is possible that a remedy package might simultaneously affect more or all of those factors. In that regard, it should be emphasised that in circumstances where the Commission establishes that the concentration under investigation would lead to the creation of a situation of tacit collusion post-merger, a remedy directed towards the elimination of one or more *Airtours* criteria would return the market to the competitive pre-merger status. However, in the situation where the Commission establishes the reinforcement of tacit collusion as a result of the merger, a remedy aimed to

⁷⁵ Recital 30 Merger Regulation 139/2004 and Merger Remedies Notice para. 9.

⁷⁶ Merger Remedies Notice para. 16 and *Gencor* para. 320. See also, S. Papon, Structural v. Behavioural Remedies In Merger Control: A Case To Case Analysis, E.C.L.R., 2009, 30(1), 36-48, p. 37 and K. Paas, Non-Structural Remedies In EU Merger Control, E.C.L.R., 2006, 27(5), 209-216, p. 209.

cancel one or more *Airtours* conditions would return the market not to the status quo ante, since this would be characterised by an element of tacit coordination, but to a more competitive outcome than the level of competition that prevailed in the pre-merger market. This later situation constitutes a deviation from the principle that the remedy must strictly return the market to its pre-merger status, while it would also contravene the proportionality principle. Nevertheless, it is justifiable on the basis of the consideration that otherwise the proposed remedies would not be able to effectively intervene against the *Airtours* conditions in such a context. Also, it would be illogical to permit the continuation of a pre-merger tacit collusion situation to the post-merger market considering the ineffective enforcement of Articles 101 and 102 against such anticompetitive conduct and bearing in mind the underlying aim to maintain effectively competitive market structures⁷⁷.

Classification

The Merger Remedies Notice endorses a basic distinction between divestitures, other structural remedies and commitments relating to the future behaviour of the merged entity, where essentially the Commission distinguishes between structural, quasi-structural and behavioural remedies⁷⁸. Quasi-structural commitments represent an intermediary category, since they entail both structural and behavioural characteristics, but they tend to be categorised within the behavioural remedies group and they are generally treated as such. In any case, these types of remedies are not mutually exclusive, since in order to effectively address anticompetitive concerns the Commission may adopt a remedy package that comprises a combination of different types of commitments as primary and supplementary undertakings.

⁷⁷ Merger Remedies Notice para. 15.

⁷⁸ Merger Remedies Notice para. 17.

Structural remedies influence competition by directly changing the structure of the relevant market. The most important structural remedy is divestiture of either an entire business, a production facility or assets such as intellectual property rights and supply or distribution contracts. In coordinated effects cases divestitures are capable to induce a simultaneous general modification of the structural features in the relevant market thereby adversely affecting the necessary conditions for coordination. Specifically, the principal aim of divestitures is to establish a new entrant or to strengthen an existing competitor in order to exercise a sufficient competitive constraint towards the oligopolists and counteract or destabilise a collusive strategy post-merger⁷⁹. At the same time, a divestiture is capable to render the market less conducive to collusion by diminishing the collective market shares held by the oligopolistic group and reduce the degree of market concentration, it could maintain the number of pre-merger market players or remove the symmetries between the largest oligopolists⁸⁰. Another type of structural remedy relates to commitments that sever structural links between competitors. These mainly concern exit commitments through which the merging parties undertake to withdraw from a joint venture by divesting their shares, commitments to divest a minority shareholding stake in a competitor and undertakings to waive the exercise of shareholders' rights in a rival firm⁸¹. The employment of this type of commitments removes the structural links that would otherwise facilitate collusion thereby

⁷⁹ Merger Remedies Notice para. 22, Merger Remedies Study p. 18, *Nestle/Perrier* para. 137 and *ABF/GBI* paras 387 and 391.

⁸⁰ *ABF/GBI* paras 386 and 390 (number of firms), *ABF/GBI* para. 387 (asymmetries) and *Rexam (PLM)/American National Can* (Case COMP/M.1939 [2000]) para. 33 (asymmetries).

⁸¹ Merger Remedies Notice paras 58-59, Merger Remedies Study pp. 18-19 and 121. See also, N. Petit, Remedies For Coordinated Effects Under The European Union Merger Regulation, 2010, available http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1639906, 1-15, p. 4.

reducing the oligopolists' ability as well as their incentive to adopt and sustain a collusive outcome. Lastly, an undertaking to grant an irrevocable long-term exclusive licence of intellectual property rights shares the characteristics of structural remedies, since it causes the transfer of intangible assets to a third party and produces the same result as the divestiture of such rights⁸².

Behavioural remedies are obligations that set constraints on the conduct of the merging firms in order to prevent competition from being undermined. Two types of commitments fall within the scope of behavioural remedies. On the one hand, undertakings to provide non-discriminatory access to infrastructure and networks or to key technology and intellectual property rights as well as commitments to terminate or limit the duration of exclusive supply or distribution agreements are quasi-structural remedies to the extent that they are behavioural commitments as they aim to control the merging firms' market conduct, but they also cause a structural effect on the market⁸³. These commitments are capable to eliminate coordinated effects concerns, since their direct goal is to facilitate new entry or to

⁸² Merger Remedies Study p. 18. See also, A. Ezrachi, Behavioural Remedies In EC Merger Control – Scope And Limitations, *World Competition*, 2006, 29(3), 459-479, p. 471.

⁸³ Merger Remedies Notice paras 62-68 and *Vodafone Airtouch/Mannesmann* (Case COMP/M.1795 [2000]) paras 58-60. See also, E. Morgan, Steering Mergers Through The EU's Regulatory Rocks: Remedies Under The EU Merger Control Regulation, *European Management Journal*, 2002, 20(5), 549-561, p. 555, N. Ersboll, Commitments Under The Merger Regulation, *E.C.L.R.*, 2001, 22(9), 357-364, pp. 360 and 363, S. Papon, above note 76, p. 40, W. Wang and M. Rudanko, EU Merger Remedies And Competition Concerns: An Empirical Assessment, *European Law Journal*, 2012, 18(4), 555-576, p. 566, A. Ezrachi, above note 82, pp. 471-473, D. Went, The Acceptability Of Remedies Under The EC Merger Regulation: Structural Versus Behavioural, *E.C.L.R.*, 2006, 27(8), 455-475, pp. 456-457 and M. Motta, M. Polo and H. Vasconcelos, Merger Remedies In The EU: An Overview, 2002, available at http://www.cerna.ensmp.fr/Documents/cerna_regulation/ColloqueMetR/Motta.pdf, 1-24, p. 17.

prevent the foreclosure of competitors that post-remedy would exert a competitive constraint upon the largest oligopolists, while they can also affect other structural features such as the number of market participants. On the other hand, purely behavioural undertakings consist in mere promises to abstain from behaving in a certain anticompetitive manner, i.e. commitments not to charge excessive prices or to remove facilitating practices such as the flow of information between competitors, and do not induce any structural change in the market⁸⁴.

Preference

The Commission and the Courts illustrate a strong preference towards structural remedies in the situation where the aim is to resolve coordinated effects concerns in horizontal mergers which, even though explainable by the specific attributes of such commitments, in principle it is contradictory to a fully-fledged case-by-case approach.

Specifically, in the Merger Remedies Notice the Commission reveals a clear preference towards structural remedies in the form of divestitures when the goal is to eliminate anticompetitive concerns in horizontal mergers, based on the findings of the Merger Remedies Study which, even though it identified some problematic structural remedies principally due to the inadequate scope of the divested package or the selection of an unsuitable purchaser, it concluded that this type of commitments has been largely effective and superior to alternatives in such concentrations⁸⁵. Also, the relevant case precedent illustrates that structural remedies form the preferred remedial solution in coordinated effects

⁸⁴ *Nestle/Perrier* para. 137 and *Danish Crown/Vestjyske Slagterier* para. 236. See also, S. Papon, above note 76, p. 40, E. Morgan, above note 83, p. 555, N. Petit, above note 81, p. 5 and D. Went, above note 83, p. 457.

⁸⁵ Merger Remedies Notice paras 17 and 22 and Merger Remedies Study p. 135.

cases and this was clearly evidenced by the Merger Remedies Study which demonstrated that a large number of commitments revolved around divestitures when the aim was to resolve collusion concerns, whilst it identified exit commitments as being a particularly important and frequently used solution in these cases⁸⁶. Such preference is attributed to the fact that the emphasis of the Commission is on the merger-induced changes on the market structure that would increase the oligopolists' ability as well as their incentives to collude, which imposes a straitjacket on the range of available remedies and leads to the acknowledgement that commitments should be primarily structural in nature, i.e. despite the gradual evolution towards a heightened emphasis on the firms' behaviour, remedies remain primarily focused on structural alterations in order to combat collusion and do not directly address the firms' behavioural incentives to collude. Additionally, the preference towards structural remedies is supported by the consideration that strong merger remedies are necessary in situations where the Commission identifies coordinated effects concerns, because ex-post enforcement under Articles 101 and 102 is ineffective against tacit collusion. Accordingly, structural remedies would be more suitable to address the risk of tacit collusion for the reason that they are more radical and durable than behavioural commitments, since they entail an immediate as well as permanent alteration on the structure of the market that prevents once and for all the competition concerns raised by the concentration and also they do not require post-merger monitoring⁸⁷.

⁸⁶ *Gencor* para. 319 and Merger Remedies Study p. 21. See also, N. Petit, above note 81, p. 6.

⁸⁷ Merger Remedies Notice para. 15 and *Gencor* para. 319. See also, W. Wang, Structural Remedies In EU Antitrust And Merger Control, *World Competition*, 2011, 34(4), 571-596, pp. 574 and 588, S. Papon, above note 76, p. 39 and I. Lianos, Competition Law Remedies In Europe – Which Limits For Remedial Discretion?, CLES Research Paper Series, 2013, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2235817, 1-83, p. 51.

Conversely, the Merger Remedies Notice illustrates the Commission's scepticism towards behavioural commitments that reflects the Merger Remedies Study's findings which identified such remedies as rather ineffective and concluded that they 'have only worked in a very limited number of instances' principally due to complexities in their design that impede their purpose, whilst they entail the disadvantage of burdensome post-merger monitoring in order to ensure compliance⁸⁸. Specifically, even though the Merger Remedies Notice acknowledges in principle that quasi-structural remedies may be effective to remove anticompetitive concerns, it delimits their application by strictly requiring that they are equivalent in their effects to divestitures and be capable of being effectively monitored⁸⁹. This rather inflexible position towards quasi-behavioural commitments is clearly mirrored in coordinated effects cases, as the Commission has only occasionally accepted access commitments, while it has never accepted commitments relating to the termination or shortening of exclusive agreements⁹⁰. As regards purely behavioural undertakings, their scope in the context of horizontal mergers has been limited in *Gencor* where the GC held that behavioural commitments amounting merely to a promise not to abuse the dominant position created or strengthened by the concentration will not be suitable, since the Commission has the power to accept only undertakings which ensure that the merger will not lead to such a position⁹¹. Also, the Merger Remedies Notice seems to suggest that in principle any mere promise to behave in a certain way and not only promises not to abuse a dominant position will not be considered sufficient to eliminate anticompetitive concerns resulting from

⁸⁸ Merger Remedies Notice paras 17 and 61 and Merger Remedies Study pp. 164-165 and 171. See also, S. Papon, above note 76, pp. 38-39.

⁸⁹ Merger Remedies Notice paras 13, 17, 61, 66 and 130.

⁹⁰ Merger Remedies Study p. 21. See also, M. Motta et al., above note 83, p. 13 and W. Wang and M. Rudanko, above note 83, p. 575.

⁹¹ *Gencor* paras 316-318. See also, D. Went, above note 83, p. 458.

horizontal mergers⁹². Thus, purely behavioural commitments are unlikely to be accepted as a stand-alone remedy in order to resolve coordinated effects concerns in horizontal mergers, but it is possible that such undertakings may form a supplementary measure in order to ensure the effectiveness of other primary remedies⁹³.

(D) THE HORIZONTAL MERGER GUIDELINES

(1) Introduction

The development of detailed Guidelines was a necessary step in order to smooth the introduction of the Merger Regulation 139/2004 substantive test. The reason for this lies in that, while the Merger Regulation 139/2004 gives little guidance as to how to carry out in practice a merger appraisal under the significant impediment to effective competition test, the Horizontal Merger Guidelines clarify its applicability by explaining in detail the factors which the Commission views as potentially raising competition concerns under each theory of harm and they present the Commission's analytical methodology in the assessment of horizontal concentrations thereby offering legal certainty as well as predictability⁹⁴. It must be pointed out that, since the Horizontal Merger Guidelines are not legally binding, their

⁹² Merger Remedies Notice paras 17 and 69.

⁹³ N. Petit, above note 81, p. 7 and W. Wang and M. Rudanko, above note 83, pp. 567 and 575.

⁹⁴ Horizontal Merger Guidelines para. 5. See also, S. Maudhuit and T. Soames, above note 10, p. 77, I. Kokkoris, above note 14, p. 45, A. Weitbrecht, EU Merger Control In 2004 - An Overview, E.C.L.R., 2005, 26(2), 67-74, p. 68, Baker and McKenzie Client Alert, New EC Merger Regulation To Take Effect On 1 May 2004, 2004, available at <http://www.bakernet.com/NR/rdonlyres/8159EBBC-45D8-482C-942B-C7991454454C/36970/NewECMRClientAlertFebruary2004.pdf> (last visited 11/08/2011), 1-4, p. 3 and S. Bishop, A. Lofaro and F. Rosati, Turning The Tables: Why Vertical And Conglomerate Mergers Are Different, E.C.L.R., 2006, 27(7), 403-406, p. 403.

successful application ultimately depends on how they are applied in practice⁹⁵. In that regard the Commission's tendency is to closely follow the Horizontal Merger Guidelines and to reinforce them with the legal precedent developed by the Courts⁹⁶.

(2) The Horizontal Merger Guidelines Analysis Of Coordinated Effects

The Horizontal Merger Guidelines present the analytical legal framework within which the likelihood of competitive harm resulting from coordination is going to be assessed in prospective cases. Thus, the Horizontal Merger Guidelines define the coordinated effects theory of harm and they set out strict requirements for its establishment.

(I) Past Precedent

The Horizontal Merger Guidelines set up the framework for the assessment of coordinated effects by following the analysis prescribed in previous Courts' decisions in a systematic way. Therefore, they preserve the value of past precedent and confirm the pre-existing practice on a number of issues by adopting the principles embodied therein⁹⁷. As an illustration of that point, the Horizontal Merger Guidelines effectively codify the *Airtours* criteria and present them as the basic building blocks for the establishment of coordination⁹⁸.

⁹⁵ D. Ridyard, S. Bishop and S. Baker, Full Marks? The Draft EC Notice On The Appraisal Of Horizontal Mergers, RBB Economics, 2003, available at http://www.rbbecon.com/publications/downloads/rbb_brief07.pdf, 1-4, p. 4 and G. Stirati, above note 9, p. 278.

⁹⁶ For example, in *ABF/GBI* the Commission applied the analysis of the Horizontal Merger Guidelines on coordinated effects in conjunction with the ECJ guidance in *Sony*.

⁹⁷ Horizontal Merger Guidelines para. 6.

⁹⁸ The Horizontal Merger Guidelines present the *Airtours* conditions as the relevant test in a coordinated effects merger investigation (para. 41) and they analyse the factors of common policy (paras 44-48), monitoring (paras 49-51), retaliation (paras 52-55) and absence of countervailing reactions (paras 56-57). See also, A. Klees, From

(II) The More Economic And Effects-Based Approach

The Horizontal Merger Guidelines clearly reflect the shift towards a more economic approach in the appraisal of mergers examined for collective dominance and strengthen the Commission's ability to address such a concept more accurately by the adoption of an improved economic analysis⁹⁹. In essence, the Horizontal Merger Guidelines follow the *Airtours* decision and they firmly establish that the examination of collective dominance in concentrations involves an assessment of the scope for tacit collusion among the market participants¹⁰⁰. Specifically, the Horizontal Merger Guidelines at paragraph 39 refer to the firms' ability to coordinate their behaviour 'even without entering into an agreement or resorting to a concerted practice' and therefore this wording does not expressly reveal a specific focus on tacit collusion nor does it clearly exclude explicit collusion from the ambit of coordinated conduct. Nevertheless, the type of analysis employed on the condition of common policy and the spirit of the Horizontal Merger Guidelines, as underpinned by the implementation of the *Airtours* test, demonstrate that the coordinated effects theory of harm as formulated therein focuses exclusively on the possibility of tacit collusion post-merger¹⁰¹. Furthermore, the adoption of a more economic approach is evident by the criteria that the Horizontal Merger Guidelines set out as necessary to be examined in the appraisal of

'*Airtours*' To '*Impala*' – Collective Dominance Under European Merger Control, *Panoptica Journal*, 2007, June, 351-367, pp. 356-357.

⁹⁹ S. Voigt and A. Schmidt, above note 33, p. 1588, Baker and McKenzie Client Alert, above note 94, p. 3 and D. Ridyard, above note 54, p. 1.

¹⁰⁰ Horizontal Merger Guidelines paras 39 and 41.

¹⁰¹ For example, the Horizontal Merger Guidelines paras 41 and 48 refer to the adoption of 'a common understanding on the terms of coordination' and para. 44 focuses on a 'common perception as to how coordination should work', i.e. terminology consistent with an implicit consensus to coordinate.

coordinated effects, i.e. the *Airtours* conditions, which are directly based on economic principles¹⁰². Additionally, the Horizontal Merger Guidelines outline and explain the basic economic principles that underline each *Airtours* condition and they also focus on the structural factors prescribed in economics that must be present in order to establish these criteria¹⁰³.

Moreover, the Horizontal Merger Guidelines adopt an effects-based approach in the assessment of concentrations and this is illustrated by the fact that they employ a counterfactual analysis which compares ‘the competitive conditions that would result from the notified merger with the conditions that would have prevailed without the merger’¹⁰⁴. Also, in the context of the effects-based approach, the Horizontal Merger Guidelines introduce the analysis of the efficiencies defence and they present in detail the conditions which must be fulfilled for its successful establishment¹⁰⁵.

Lastly, the Horizontal Merger Guidelines signal the Commission's intention to move beyond an examination based purely on structural indicators and to place an increased focus on the behaviour of the market participants post-merger. Thus, the Horizontal Merger Guidelines again follow the *Airtours* judgment and apply an analytical approach that evaluates how the merger changes both the structural features of the relevant market and the firms’ behavioural incentives in order to determine whether the concentration alters the

¹⁰² Note also the discussion on the relationship between economic theory and the *Airtours* conditions at Ch. 3.

¹⁰³ Horizontal Merger Guidelines paras 44-57. Note also the discussion on the structural factors examined in order to assess the likelihood of coordination at Ch. 3. See also, I. Kokkoris, above note 14, p. 46.

¹⁰⁴ Horizontal Merger Guidelines para. 9 and *ABF/GBI* para. 144.

¹⁰⁵ Note also the discussion on efficiencies at Ch. 4. See also, I. Kokkoris, above note 14, pp. 46-47.

nature of competition between competitors so as to increase the likelihood of coordination post-merger¹⁰⁶.

(3) The Non-Horizontal Merger Guidelines

The Commission issued in 2007 the Non-Horizontal Merger Guidelines in order to present its analytical approach on the assessment of vertical and conglomerate concentrations¹⁰⁷. The Commission set out the framework for the appraisal of non-horizontal mergers by following the methodology employed in the Horizontal Merger Guidelines and distinguished possible anticompetitive outcomes between unilateral and coordinated effects¹⁰⁸.

The analysis of coordinated effects in the Non-Horizontal Merger Guidelines does not contain any provision that alters or exceeds the methodology established in the Horizontal Merger Guidelines¹⁰⁹. Specifically, the Non-Horizontal Merger Guidelines set up the framework for the examination of coordinated effects by focusing on the *Airtours* test and the assessment of the ability as well as the incentive of the oligopolists to adopt a common policy

¹⁰⁶ Note also the discussion on the *Airtours* judgment where the GC focused on a mixture of structural factors and behavioural incentives in the analysis of coordination at Ch. 4.

¹⁰⁷ Guidelines On The Assessment Of Non-Horizontal Mergers Under The Council Regulation On The Control Of Concentrations Between Undertakings ([2007], OJ C265/6 [2008], available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:265:0006:0025:en:PDF>).

¹⁰⁸ Non-Horizontal Merger Guidelines para. 17. See also, J. Church, The Church Report's Analysis Of Vertical And Conglomerate Mergers: A Reply To Cooper, Froeb, O'Brien And Vita, J.C.L.&E., 2005, 1(4), 797-802, p. 797.

¹⁰⁹ The Non-Horizontal Merger Guidelines paras 79–90 analyse coordinated effects in the context of vertical mergers and paras 119-121 set out the framework for the assessment of such a theory of harm in conglomerate mergers.

of tacit collusion and to sustain such an outcome over time¹¹⁰. Moreover, the Non-Horizontal Merger Guidelines present a number of structural factors identical to those contained in the Horizontal Merger Guidelines that facilitate the establishment of the necessary conditions for coordination. Thus, the contribution of the Non-Horizontal Merger Guidelines to the theoretical analysis of coordinated effects is virtually absent, since they closely resemble the Horizontal Merger Guidelines and they do not bring about any improvement to such a theory of harm. Nonetheless, since the introduction of the Non-Horizontal Merger Guidelines, coordinated effects have played a negligible role in the Commission's enforcement practice in vertical and conglomerate mergers, because in these types of concentrations coordination

¹¹⁰ The Non-Horizontal Merger Guidelines para. 79 adopts an identical definition for coordinated effects to the Horizontal Merger Guidelines para. 22. Also, the *Airtours* test, as contained in the Horizontal Merger Guidelines para. 41, is integrated in the Non-Horizontal Merger Guidelines para. 81 in relation to the analysis of vertical mergers and para. 119 as regards the examination of conglomerate mergers. The Commission used the *Airtours* test in *TomTom/TeleAtlas* (Case COMP/M.4854 [2008]) paras 277-283 where it dismissed coordination as a concern, because it was unlikely that the market participants would reach a common policy of collusion, while monitoring and deterrence could also not be established. See also, McDermott, Will and Emery, New Draft Guidelines Facilitate Acquisitions In Europe, 2007, available at http://www.mwe.com/index.cfm/fuseaction/publications.nldetail/object_id/cf3e47d2-a74f-4e17-adf9-f3db354a78c7.cfm, 1-3, pp. 2-3, A. Petrasincu, The European Commission's New Guidelines On The Assessment Of Non-Horizontal Mergers - Great Expectations Disappointed, E.C.L.R., 2008, 29(4), 221-228, pp. 225-226 and 228 and M. Hughes and D. Wirth, The Assessment Of Non-Horizontal Mergers Under EC And UK Merger Control, 2010, available at <http://www.iclg.co.uk/khadmin/Publications/pdf/3237.pdf> (last visited 24/02/2011), 1-9, pp. 6 and 8.

may materialise in exceptional circumstances if at all, to the extent that such anticompetitive effects may only exist at a theoretical level¹¹¹.

(E) EU-US MERGER CONTROL CONVERGENCE

(1) Introduction

The EU and US Merger Control systems have traditionally evolved with varying backgrounds and this has resulted to substantial divergences in the past on the assessment of horizontal concentrations¹¹². Nonetheless, the EU substantive standard contained in the Merger Regulation 139/2004 reflects the US merger appraisal test and the EU Horizontal Merger Guidelines closely matched the 1992 US Horizontal Merger Guidelines, which led to an increased degree of convergence that standardised the framework for the assessment of horizontal concentrations and the examination of coordinated effects¹¹³. However, such convergence has been disrupted by the introduction of the 2010 US Horizontal Merger Guidelines, which are divergent to the EU Horizontal Merger Guidelines in the analysis of coordination¹¹⁴.

(2) Significant Impediment To Effective Competition v. Substantial Lessening Of Competition

¹¹¹ ICC, Comments On Draft EC Guidelines On The Assessment Of Non-Horizontal Mergers Under The Council Regulation On The Control Of Undertakings Between Undertakings, 2005, available at http://ec.europa.eu/competition/mergers/legislation/files_non_horizontal_consultation/icc.pdf, 1-13, pp. 8-9.

¹¹² V. Selvam, above note 7, p. 52.

¹¹³ U.S. Department Of Justice And The Federal Trade Commission, Horizontal Merger Guidelines ([1992], available at <http://www.ftc.gov/bc/docs/horizmer.shtm>).

¹¹⁴ U.S. Department Of Justice And The Federal Trade Commission, Horizontal Merger Guidelines ([2010], available at <http://www.ftc.gov/os/2010/08/100819hmg.pdf>).

The old EU ‘dominance’ standard was inconsistent with the US ‘substantial lessening of competition’ test and this divergence led to conflicting decisions and created controversies¹¹⁵. Nevertheless, the adoption of the EU ‘significant impediment to effective competition’ standard under the Merger Regulation 139/2004 reflects the US merger appraisal test and gives rise to a new era characterised by a high degree of convergence between the respective Merger Control systems¹¹⁶. On the one hand, the wording of the significant impediment to effective competition standard is broadly synonymous to the substantial lessening of competition test and despite the fact that the EU substantive test still refers to dominance, there is convergence on the essence of the EU and the US tests¹¹⁷. On the other hand, the EU and the US merger appraisal tests are similar as regards their substantive analysis, because the Merger Regulation 139/2004 test closes the gap in theories of competitive harm between the former EU dominance test and the US substantial lessening

¹¹⁵ Examples of such conflicting outcomes are the decisions in *General Electric/Honeywell* and *Boeing/McDonnell Douglas* (Case IV/M.877 [1997], OJ L336/16 [1997], 5 CMLR 270 [1997]). See also, V. Selvam, above note 7, pp. 58 and 61, A. Weitbrecht, EU Merger Control In 2001 - The Year Of Controversy, E.C.L.R., 2002, 23(8), 407-412, p. 407 and M. Egge, M. Bay and J. Calzado, The New EC Merger Regulation: A Move To Convergence, Antitrust, 2004, Fall, 37-42, pp. 37-38.

¹¹⁶ M. Walker, above note 45, p. 21, M. Monti, Convergence In EU-US Antitrust Policy Regarding Mergers And Acquisitions: An EU Perspective, 2004, available at <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/04/107&format=HTML&aged=1&language=EN&guiLanguage=en>, 1-4, p. 3, ICN Report On Merger Guidelines, Coordinated Effects Analysis Under International Merger Regimes, 2004, available at <http://www.internationalcompetitionnetwork.org/uploads/library/doc560.pdf>, 1-25, p. 4, A. Renckens, above note 29, p. 165, A. Zutven and H. Urlus, above note 37, p. 3 and S. Megregian and D. Garrod, EU And US Merger Control: Transatlantic Convergence Rolls On, Comp. Law, 2005, 4(2), 124-157, p. 143.

¹¹⁷ M. Egge et al., above note 115, p. 40, M. Litzell, above note 1, pp. 52-53 and A. Weitbrecht, above note 94, p. 68.

of competition test by the introduction of unilateral effects in the analysis of concentrations and the embracement of concerns over the coordinated effects of mergers. Accordingly, these jurisdictions nowadays employ a similar substantive framework for the examination of horizontal mergers, which encourages the respective competition authorities to address the same types of anticompetitive effects and paves the way for largely convergent assessments¹¹⁸.

Nonetheless, it should be noted that, despite the convergence between the EU and US merger appraisal standards, there may still be divergent decisions due to different factual circumstances or to different effects of concentrations on each particular market¹¹⁹. Also, there may be divergences in the way the regulators apply these standards in each individual case, as competition authorities looking at the same facts can at times reasonably come to different conclusions¹²⁰. Moreover, divergences may arise for the reason that each competition system follows its own policy goals and purposes of protection¹²¹. Such divergences are currently more likely to occur in the assessment of coordinated effects,

¹¹⁸ M. Egge et al., above note 115, p. 41 and H. Erdem, Critic Of Turkish Competition Law In The Light Of EU Merger Regulation, 2006, available at <http://oldweb.yeditepe.edu.tr/7tepe/egitim/lisans/hukuk/UNCTAD/tebligler/ercumenterdem-article.doc>, 1-18, pp. 11-12.

¹¹⁹ S. Voigt and A. Schmidt, Switching To Substantial Impediments Of Competition (SIC) Can Have Substantial Costs - SIC!, E.C.L.R., 2004, 25(9), 584-590, p. 588 and R. Whish, Analytical Framework Of Merger Review - Substantial Lessening Of Competition/Creation Or Strengthening Of Competition, ICN First Annual Conference, 2002, available at <http://www.internationalcompetitionnetwork.org/uploads/library/doc565.pdf>, 1-4, pp. 1-2.

¹²⁰ M. Litzell, above note 1, p. 53 and A. Riesenkauff, above note 8, p. 726.

¹²¹ U. Boege, above note 3, p. 4.

because the EU Horizontal Merger Guidelines and the 2010 US Horizontal Merger Guidelines are to an important extent distinctive in the analysis of such a theory of harm.

(3) EU Horizontal Merger Guidelines v. 2010 US Horizontal Merger Guidelines: Coordinated Effects

The EU Horizontal Merger Guidelines correspond to the 1992 US Horizontal Merger Guidelines and the 2010 US Horizontal Merger Guidelines to the extent that they all embrace coordinated effects as a theory of competitive harm that may result from horizontal concentrations¹²². However, even though the EU Horizontal Merger Guidelines and the 1992 US Horizontal Merger Guidelines adopted a similar framework for the assessment of coordinated effects, the 2010 US Horizontal Merger Guidelines employ an analysis that is significantly divergent to the examination of such a theory of harm under the EU Horizontal Merger Guidelines.

(I) Types Of Anticompetitive Parallel Behaviour

An important divergence between the EU Horizontal Merger Guidelines and the 2010 US Horizontal Merger Guidelines relates to the types of anticompetitive parallel conduct that are included within the legal theory of coordination.

¹²² Section 7 2010 US Horizontal Merger Guidelines, Sections 2.1-2.12 1992 US Horizontal Merger Guidelines and EU Horizontal Merger Guidelines paras 39-57. See also, H. Wellford and G. Wells, The ‘Litigation Mulligan’ In The 2010 Merger Guidelines: Better Economics But Not (Necessarily) More Clarity Before The Agencies And The Courts, C.P.I., 2010, October, 1-11, p. 4, E. Matto, The 2010 Horizontal Merger Guidelines: How The Guidelines Will Change The FTC/DOJ Analysis Of U.S. Mergers, 2011, available at <http://www.terralext.org/publication/3d5a6959f9>, 1-6, pp. 1-2 and C. Varney, The 2010 Horizontal Merger Guidelines: Evolution, Not Revolution, Antitrust L.J., 2011, 77(2), 651-660, pp. 651 and 660.

The EU Horizontal Merger Guidelines focus on the notion that coordinated effects are based on the likelihood of sustainable tacit collusion and to that extent they are convergent with the 2010 US Horizontal Merger Guidelines which also encompass tacit collusion as one type of coordinated conduct¹²³. Nevertheless, the 2010 US Horizontal Merger Guidelines additionally focus on explicit collusion as a type of anticompetitive parallel behaviour which is included within the ambit of coordinated interaction¹²⁴. Such an assertion is contradictory to the EU Horizontal Merger Guidelines, since they do not expressly include explicit collusion within the scope of coordinated behaviour and this is an important difference in form. However, it is not an important difference in substance, because the ECJ in *Sony* embraced the theoretical possibility to establish explicit collusion as the cause of parallelism in a coordinated effects merger assessment and accordingly there is a degree of convergence in the wider framework of the EU and US Merger Control systems on that issue¹²⁵.

Nonetheless, the 2010 US Horizontal Merger Guidelines expand the analysis of coordination by including within its ambit a theory of parallel accommodating conduct which does not require a prior understanding between the oligopolists, it is based on individual rationality of conduct, there is no retaliation and it leads to higher prices as well as it weakens the firms' competitive incentives¹²⁶. On the one hand, this theory introduces an important element of divergence, as it is not only outside the boundaries of the EU Horizontal Merger Guidelines analysis of coordination, but also it comprises elements such as the absence of retaliation and its foundation solely on rationality of conduct, which are in direct

¹²³ Section 7 2010 US Horizontal Merger Guidelines and EU Horizontal Merger Guidelines paras 39 and 41.

¹²⁴ Section 7 2010 US Horizontal Merger Guidelines.

¹²⁵ Note also the discussion on the *Sony* dictum on explicit collusion at Ch. 2.

¹²⁶ Section 7 2010 US Horizontal Merger Guidelines.

contradiction with the relevant EU precedent, since they reflect the Commission's formulations in *Airtours/First Choice* that were expressly rejected by the GC in *Airtours*¹²⁷. On the other hand, the theory of parallel accommodating conduct presents some problematic features that may raise a caution flag in its potential implementation in the analysis of coordinated effects under the EU Merger Control framework. Thus, such a concept introduces an important 'labelling' problem, since even though it is classified within the 2010 US Horizontal Merger Guidelines as a coordinated effects scenario, it exposes a substantial degree of overlap with the dynamics of unilateral effects¹²⁸. In particular, besides the fact that the theory of unilateral effects includes within its ambit an anticompetitive scenario of price leadership followed by accommodating responses of rivals as reflected in the EU Horizontal Merger Guidelines paragraph 24, both parallel accommodating conduct as well as unilateral effects present the common element that they are not induced or 'motivated by' the threat of retaliation¹²⁹. However, the absence of necessity for a retaliation mechanism puts forward another problem, since it has been claimed that punishment is necessary for the sustainability of parallel accommodating conduct and in particular the stability of such conduct depends on

¹²⁷ Note also the discussion on the *Airtours/First Choice* Commission decision at Ch. 2.

¹²⁸ E. Reed and R. Higgins, *Economic Theories Of MFNs: Harms And Efficiencies*, 2012, available at https://www.healthlawyers.org/Members/PracticeGroups/Documents/Benefits/PGs_ExSumm_MFN_Clauses.pdf, 1-21, p. 6, D. Neven, *First Impressions On The Revised US And UK Merger Guidelines*, GRC Conference, 2010, available at http://ec.europa.eu/dgs/competition/economist/dn_conference_september_2010.pdf, 1-16, p. 10, N. Petit, *The 'Oligopoly Problem' In EU Competition Law*, 2012, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1999829, 1-78, p. 23 and C. Shapiro, *Update From The Antitrust Division*, 2010, available at <http://www.justice.gov/atr/public/speeches/264295.pdf>, 1-34, pp. 27-28.

¹²⁹ J. Ordovery, *Thinking About Coordinated Effects*, 2012, available at http://www.concurrences.com/spip.php?action=accéder_document&arg=15590&cle=d63e5bcd1cacd556e19c4941456e4930345028b3&file=pdf%2F_concurrences_3-2012_editorial_ordover.pdf, 1-2, p. 2.

the ability of the merged firm to inflict lower future profit upon the non-compliant firm(s)¹³⁰. This is evident by the fact that in order to decide its strategy, i.e. whether to match and abide, each follower employs a trade-off between current and future profits that is essentially determined by the leader's resignation from the price increase and its reversion to a lower price if there is lack of accommodation, i.e. no matching or cheating, which essentially forms a punishment measure¹³¹. Furthermore, another problematic feature relates to the fact that it is questionable whether it would be appropriate to introduce in the EU Merger Control framework a novel theory of harm that is heavily based on rationality of conduct, bearing in mind the emergence and potential further expansion of behavioural economics that contradict such an assumption¹³². Nevertheless, it is notable that the theory of parallel accommodating conduct, as it has been formulated in the 2010 US Horizontal Merger Guidelines, points towards more flexible evidentiary requirements than the standardised requirements necessary for the demonstration of tacit collusion and in addition its assessment is facilitated by the applicability of econometric analysis. Specifically, the CPPI (coordinated pricing pressure index) focuses on the analysis of the firms' incentives to engage in parallel accommodating conduct in differentiated product markets and is related to the quantification measures for the assessment of unilateral effects in such markets that were introduced by the 2010 US Horizontal Merger Guidelines¹³³. The CPPI depends on the price margins, own-price

¹³⁰ J. Harrington, Evaluating Mergers For Coordinated Effects And The Role Of 'Parallel Accommodating Conduct', 2012, available at http://krieger2.jhu.edu/economics/wp-content/uploads/pdf/papers/wp601_harrington.pdf, 1-17, pp. 6 and 15.

¹³¹ J. Harrington, above note 130, pp. 4-5 and J. Ordovery, above note 129, p. 2.

¹³² Note also the discussion on behavioural economics at Ch. 3.

¹³³ The CPPI essentially forms an index of upwards pricing pressure and in particular it corresponds to the GUPPI. Note also the discussion on the pricing pressure indexes applicable in the analysis of unilateral effects at Ch. 7. See also, S. Moresi, D. Reitman, S. Salop and Y. Sarafidis, Gauging Parallel Accommodating Conduct

elasticity and volume shares of the two potentially coordinating firms as well as on the diversion ratio between their products when one of those firms raises its price and assesses the extent to which the firms are prone to parallel accommodating conduct pre-merger, while this index is then compared to the post-merger index¹³⁴. The difference between the pre-merger CPPI and the post-merger CPPI forms the Delta CPPI that represents the impact of the merger on parallel accommodating conduct and is related to the change in the price pressure resulting from the concentration, i.e. it calculates the increase in the maximum parallel price that the firms can achieve by engaging in such conduct post-merger versus pre-merger¹³⁵. In the situation where such an analysis demonstrates that the largest market players would have an increased incentive to engage in parallel accommodating conduct post-merger and the products offered by the smaller rivals are distant substitutes, the Commission would then have to consider each firm's cheating incentives, the likelihood of product repositioning by actual competitors or of entry by potential competitors as well as possible efficiencies resulting from the concentration which could lead the merged entity to prefer lower prices¹³⁶. Overall, the theory of parallel accommodating conduct could facilitate the establishment of coordinated effects due to the absence of a necessity to establish a prior coordinated

Concerns With The CPPI, 2011, available at [http://crai.co.uk/uploadedFiles/Publications/Gauging_Parallel_Accommodating_Conduct_Concerns_with_the_CPPI\(2\).pdf](http://crai.co.uk/uploadedFiles/Publications/Gauging_Parallel_Accommodating_Conduct_Concerns_with_the_CPPI(2).pdf), 1-40, p. 5 and W. Page and J. Woodbury, Paper Trail: Working Papers And Recent Scholarship, 2011, available at [http://www.crai.com/uploadedFiles/Publications/oct11_papertrail_10_24_woodbury\(1\).pdf](http://www.crai.com/uploadedFiles/Publications/oct11_papertrail_10_24_woodbury(1).pdf), 1-8, p. 7.

¹³⁴ S. Moresi et al., above note 133, pp. 10 and 28, W. Page and J. Woodbury, above note 133, pp. 5 and 7 and S. Besen, S. Kletter, S. Moresi, S. Salop and J. Woodbury, An Economic Analysis Of The *AT&T-T-Mobile* USA Wireless Merger, *Journal Of Competition Law And Economics*, 2013, 9(1), 23–47, pp. 42-43.

¹³⁵ S. Moresi et al., above note 133, note , pp. 1, 4, 6 and 20.

¹³⁶ S. Moresi et al., above note 133, p. 6 and W. Page and J. Woodbury, above note 133, p. 7.

understanding, the alleged lack of need to demonstrate a retaliation mechanism and the ability to employ econometric analysis in the assessment of mergers in differentiated markets. Nonetheless, complexities relating to the fact that such a theory contradicts the established EU precedent, its classification problem and the nubilous position on the requirement of punishment as well as its heavy reliance on rationality point towards a ‘wait and see’ approach in relation to how this concept will be implemented in EU Merger Control.

(II) The Test For Coordinated Effects, Market Characteristics And Behaviour

The EU Horizontal Merger Guidelines declare that the cumulative conditions of a common policy, monitoring, retaliation and absence of external countervailing reactions form the test that is employed in the assessment of coordinated effects¹³⁷. The 2010 US Horizontal Merger Guidelines set out the identical criteria of a common understanding, detection of cheating and punishment of deviations in order to define tacit collusion, but they do not assert that these factors form the test that is employed in the assessment of coordinated effects¹³⁸. On the contrary, the 2010 US Horizontal Merger Guidelines are divergent to the EU Horizontal Merger Guidelines, since they employ a differentiated cumulative three-prong test, which focuses on whether the merger would significantly increase concentration and lead to a moderately or highly concentrated market, whether the market shows signs of vulnerability to coordinated conduct and whether there is a credible basis on which to conclude that the merger may enhance that vulnerability¹³⁹.

¹³⁷ EU Horizontal Merger Guidelines para. 41 and *ABF/GBI* para. 143.

¹³⁸ Section 7 2010 US Horizontal Merger Guidelines.

¹³⁹ Section 7.1 2010 US Horizontal Merger Guidelines. See also, O’Melveny and Myers LLP, U.S. Antitrust Agencies Issue Revised Horizontal Merger Guidelines, 2010, available at <http://omm.com/us-antitrust-agencies-issue-revised-horizontal-merger-guidelines-08-20-2010/>, 1-3, p. 2 and Covington and Burling LLP, U.S. Antitrust Agencies Issue Revised Horizontal Merger Guidelines, 2010, available at

Nevertheless, the EU Horizontal Merger Guidelines and the 2010 US Horizontal Merger Guidelines are overlapping to the extent that they examine the same structural characteristics of the relevant market¹⁴⁰. Also, both Horizontal Merger Guidelines centre on the post-merger behaviour of the firms in terms of their incentives to coordinate or to compete¹⁴¹. However, the framework within which these conditions are analysed is divergent. Specifically, the EU Horizontal Merger Guidelines examine such factors in order to assess whether the oligopolists would adopt and sustain a common collusive policy, whereas the 2010 US Horizontal Merger Guidelines focus on these criteria in order to evaluate the presence of market vulnerability to coordinated conduct.

(F) CONCLUSION

The Merger Regulation 139/2004 modifies the substantive test for the appraisal of concentrations and in conjunction with the Horizontal Merger Guidelines they modernise the framework for the analysis of collective dominance merger cases.

Before the introduction of the Merger Regulation 139/2004, a number of arguments were raised that supported both the continuance of the assessment of concentrations on the basis of the dominance test as well as its replacement with the substantial lessening of

<http://www.cov.com/files/Publication/c9851377-6281-4815-9695-061adad98ce9/Presentation/PublicationAttachment/2e7bffd0-eb90-44cf-87fe-0f2ddbc13a67/U.S.%20Antitrust%20Agencies%20Issue%20Revised%20Horizontal%20Merger%20Guidelines.pdf>, 1-5, p. 3.

¹⁴⁰ Section 7.2 2010 US Horizontal Merger Guidelines and EU Horizontal Merger Guidelines paras 42-57.

¹⁴¹ Sections 7.1 and 7.2 2010 US Horizontal Merger Guidelines (incentives to collude) and EU Horizontal Merger Guidelines paras 48 and 54 (incentives to coordinate or retaliate).

competition test. The Merger Regulation 139/2004 finally adopts the ‘significant impediment to effective competition’ substantive standard, which addresses and resolves most of the problems identified in the old test.

The introduction of the significant impediment to effective competition test alters the form of the appraisal undertaken in the examination of concentrations, it strengthens the substance of the analysis in collective dominance merger cases and it produces important policy implications. As a matter of form, the substantive test embodied in the Merger Regulation 139/2004 replaces the two-stage test contained in the Merger Regulation 4064/89 and requires only the significant impediment to effective competition criterion to be established in order to reach a prohibition decision, while dominance is merely the principal example of such a situation. In relation to the substantive analysis of concentrations, the new merger appraisal test, as explained in the Horizontal Merger Guidelines, explicitly recognises that coordinated effects form a valid theory of harm in EU Merger Control and it introduces the assessment of the unilateral effects of concentrations. Moreover, the new substantive test verifies the turn towards a more economic approach in the analysis of collective dominance in mergers, it paves the way towards an assessment based on the effects of concentrations on competition and it directs the Commission to consider both the relevant structural characteristics as well as the firms’ behavioural incentives in its examination. Also, the new merger appraisal test preserves the precedent developed under the dominance standard, but it does not entirely eliminate the potential overlap between the analysis of collective dominance in mergers and the assessment of the abuse of collective dominance under Article 102. As a matter of policy, the amendment of the substantive test lowers the intervention threshold that is applicable in horizontal mergers assessed for unilateral effects, whilst there is no such lowering in coordinated effects cases and this position holds firm irrespective of whether the

Commission would rely on the ‘direct’ or the ‘indirect’ demonstration of incompatibility. Furthermore, even though the Commission relies to a greater extent on unilateral effects in the appraisal of horizontal concentrations under the new substantive test, such a theory of harm is not predominant as collusion concerns remain valid. On the issue of enforcement, numerous considerations point towards possible under-enforcement of collective dominance in horizontal concentrations post-Merger Regulation 139/2004. Also, remedies enjoy an important role in the post-Merger Regulation 139/2004 context of enforcement and in coordinated effects cases the Commission illustrates a strong preference for structural commitments aimed to cancel one or more of the *Airtours* criteria.

The Horizontal Merger Guidelines establish a clear methodology for the assessment of coordinated effects. Such methodology verifies the past collective dominance precedent, it implements a more economic approach in the analysis of coordinated effects, it employs an assessment which emphasises on the effects of mergers on competition and it focuses on the firms’ behaviour along structural indicators. The Non-Horizontal Merger Guidelines closely reflect the analysis of coordinated effects as embodied in the Horizontal Merger Guidelines and accordingly they do not alter nor expand the foundation set out in the latter Guidelines.

Lastly, the EU significant impediment to effective competition and the US substantial lessening of competition standards are similar as regards their wording but also in relation to their substantive analysis and such overlaps lead to an increased degree of convergence between the EU and the US Merger Control systems. Nonetheless, the EU Horizontal Merger Guidelines and the 2010 US Horizontal Merger Guidelines present divergences on the types of anticompetitive parallel conduct that are included within the legal theory of coordination and on the test employed in the assessment of coordinated effects.

CHAPTER 6

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THE COMPARATIVE ANGLE I: COLLECTIVE DOMINANCE IN MERGERS v. ARTICLE 102 COLLECTIVE DOMINANCE AND ARTICLE 101 CONCERTED PRACTICES

(A) INTRODUCTION

The introduction and the development of the legal concepts of concerted practices under Article 101, collective dominance under Article 102 and collective dominance under the Merger Regulation aimed at the regulation of collusive behaviour.

Specifically, the concept of concerted practices was launched in order to control collusive conduct arising under the circumstances specified in Article 101(1). Nevertheless, there was a gap in the enforcement of EU Competition Law, because concerted practices applied to the situation where the firms explicitly coordinated their behaviour, while tacit collusion would be caught only in exceptional circumstances, if at all, and consequently this concept was not in itself a sufficient tool to regulate every instance of anticompetitive conduct that arose in oligopolies. Moreover, despite the fact that the subsequent introduction and evolution of the concept of collective dominance under Article 102 conferred on the Commission and the Courts the competence to control both tacit and explicit collusion, their focus was shed on the latter form of coordination. As a result, the concept of collective dominance under the Merger Regulation was developed in order to close this gap and

regulate behaviour that arose beyond explicit collusion and took the form of tacitly collusive market conduct.

This Chapter compares the concept of collective dominance under the Merger Regulation to the concepts of collective dominance under Article 102 and concerted practices under Article 101 in relation to their respective treatment of tacit collusion. Section B examines the concept of collective dominance under Article 102 as it presents the necessary conditions for its establishment and emphasises on its overlapping conceptual substance, but divergent enforcement, on tacit collusion in relation to the concept of collective dominance under the Merger Regulation, whilst it also briefly highlights the lack of emphasis on exclusionary conduct in the later context. Section C analyses the concept of concerted practices under Article 101 by presenting the elements that need to be established in order to demonstrate concertation and accentuates its divergent perception of tacit collusion as opposed to the concept of collective dominance in mergers. Lastly, Section D concludes by underlining the main features of the analysis.

(B) COLLECTIVE DOMINANCE: ARTICLE 102 v. MERGER REGULATION

(1) The Three-Prong Test Under Article 102

The Commission and the Courts apply a three-prong test in order to establish collective dominance under Article 102 that analyses separately whether the undertakings hold a collective position, whether such a collective position is dominant and whether such a collective dominant position has been abused¹.

¹ *Compagnie Maritime Belge v. Commission* (Cases C-395 and 396/96P [2000], ECR I-1365 [2000], 4 CMLR 1076 [2000]) para. 39. See also, M. Jephcott and C. Withers, *Where To Go Now For E.C. Oligopoly Control?*,

(I) Collective Position

In *Italian Flat Glass* the Commission introduced and the GC verified the application of the concept of collective dominance under Article 102 to several legally and economically independent undertakings united by some form of economic links, which caused them to adopt the same market conduct and act as a collective entity vis-a-vis the other operators on the relevant market². Accordingly, it can be inferred that the establishment of the collective position criterion depends on the fulfilment of two requirements. Firstly, there needs to be a connecting factor in the form of links between the market participants³. Secondly, this connecting factor must be such as to lead several independent undertakings to present themselves or act as a collective entity in the relevant market⁴. However, this two-fold test is

E.C.L.R., 2001, 22(8), 295-303, p. 300 and F. Depoortere and G. Motta, *The Doctrine Of Collective Dominance: All Together Forever?*, G.C.P., 2009, October, 1-8, p. 2.

² *Italian Flat Glass* para. 358. See also, D. Pope, *Case Comment - Some Reflections On Italian Flat Glass*, E.C.L.R., 1993, 14(4), 172-175, p. 175, B. Rodger, *Oligopolistic Market Failure: Collective Dominance Versus Complex Monopoly*, E.C.L.R., 1995, 16(1), 21-29, pp. 23-24, F. Depoortere and G. Motta, above note 1, pp. 2-3, D. Ridyard, *Joint Dominance And The Oligopoly Blind Spot Under The EC Merger Regulation*, E.C.L.R., 1992, 13(4), 161-164, p. 164 and S. Stroux, *Case Comment - Collective Dominance Under The Merger Regulation: A Serious Evidentiary Reprimand For The Commission*, E.L.Rev., 2002, 27(6), 736-746, p. 737.

³ C. Gordon and R. Richardson, *Collective Dominance: The Third Way?*, E.C.L.R., 2001, 22(10), 416-423, pp. 417-418 and T. Vecchi, *Unilateral Conduct In An Oligopoly According To The Discussion Paper On Article 82: Conscious Parallelism Or Abuse Of Collective Dominance?*, *World Competition*, 2008, 31(3), 385-400, p. 389.

⁴ A. Onuma, *To What Extent Is The Concept Of Collective Dominance Applicable Under The ECMR?*, 2005, available at http://www.dundee.ac.uk/cepmlp/car/html/car8_article10.pdf, 1-25, pp. 16-17, G. Monti, *The Scope Of Collective Dominance Under Article 82 EC*, C.M.L.R., 2001, 38, 131-157, p. 133, B. Hawk and G. Motta, *Oligopolies And Collective Dominance: A Solution In Search Of A Problem*, *Fordham University School Of Law*, 2008, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1301693, 59-104, p. 77, T. Vecchi,

in substance one and the collective entity requirement is the principal condition, while links play only a subordinate role⁵. In particular, the presence of links is a necessary condition for the establishment of a collective position only when they are the means by which the collective entity requirement is fulfilled, whilst the mere existence of such a connecting factor is legally inconsequential⁶.

Links

In order to establish the collective entity requirement, the Commission must examine the economic links or factors which give rise to a connection between independent undertakings⁷. On the one hand, the existence of economic links may be based on the fact that the undertakings have concluded an agreement or adopted a concerted practice within the meaning of Article 101. On the other hand, in *Compagnie Maritime Belge* the ECJ held that economic links do not need to be strictly contractual or structural in nature, but instead the

above note 3, p. 390, F. Bektashi, *Collective Dominance In EC Competition Law: Role Of Structural Links - Case Law Analysis Under The EC Merger Regulation*, VDM Verlag, First Edition, 2008, p. 33, T. Feaster and P. Treacy, Case Comment - *Compagnie Maritime Belge Transports SA v. Commission Of The European Communities*, E.C.L.R., 1997, 18(7), 467-472, p. 471 and S. Stroux, Is EC Oligopoly Control Outgrowing Its Infancy?, *World Competition*, 2000, 23(1), 3-50, p. 21.

⁵ *Compagnie Maritime Belge* Opinion (Opinion Of Advocate General Fenelly, *Compagnie Maritime Belge v. Commission* [1998], ECR I-1365 [2000]) para. 28. See also, B. Hawk and G. Motta, above note 4, pp. 77-79 and S. Stroux, *US And EC Oligopoly Control*, Kluwer, First Edition, 2004, p. 103.

⁶ L. Vitzilaiou and C. Lambadarios, The Slippery Slope Of Addressing Collective Dominance Under Article 82 EC, *G.C.P.*, 2009, October, 1-10, pp. 2-3.

⁷ *Compagnie Maritime Belge* para. 41 and *Almelo* para. 42. Note also the discussion on links in the analysis of collective dominance under Article 102 at Ch. 4. See also, L. Hancher, *Gemeente Almelo And Others v. Energiebedrijf*, C.M.L.R., 1995, 32, 305-325, p. 317 and S. Stroux, *Compagnie Maritime Belge And Others v. Commission*, C.M.L.R., 2000, 37, 1249-1264, p. 1258.

collective entity requirement may be established on the basis of ‘other connecting factors’, which would depend on an economic assessment of the structure of the market in question⁸. Therefore, the ECJ implied that the existence of mere oligopolistic interdependence could constitute the requisite connecting factor and consequently the members of an oligopoly may act as a collective entity because of their reactions to the market structure and even if there were no contractual or structural links between them⁹.

Collective Entity

For a collective position to be established under Article 102, two or more independent economic entities must present themselves or act as a collective entity on the relevant market¹⁰. Accordingly, there must be absence of effective competition within the

⁸ *Compagnie Maritime Belge* para. 45 and Discussion Paper (DG Competition Discussion Paper On The Application Of Article 82 Of The Treaty To Exclusionary Abuses, 2005, available at <http://ec.europa.eu/competition/antitrust/art82/discpaper2005.pdf>) para. 46. See also, C. Gordon and R. Richardson, above note 3, pp. 418-419, B. Hawk and G. Motta, above note 4, p. 90, S. Preece, Case Comment - *Compagnie Maritime Belge*: Missing The Boat?, E.C.L.R., 2000, 21(8), 388-393, p. 390, P. Fernandez, Case Comment, Increasing Powers And Increasing Uncertainty: Collective Dominance And Pricing Abuses, E.L.Rev., 2000, 25(6), 645-653, p. 647 and D. Waelbroeck and P. Colomo, *Laurent Piau* - Order Of The Court Of Justice, C.M.L.R., 2006, 43, 1743-1756, p. 1753.

⁹ S. Stroux, above note 7, p. 1260, D. Geradin, P. Hoferm, F. Louis, N. Petit and M. Walker, The Concept Of Dominance In EC Competition Law, Global Competition Law Centre - Research Paper On The Modernization Of Article 82 EC, 2005, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=770144, 1-31, p. 22, M. Jephcott and C. Withers, above note 1, p. 303, A. Llorens, Case Comment - Collective Dominance: A Mechanism For The Control Of Oligopolistic Markets?, Cambridge Law Journal, 2000, 59(2), 253-257, p. 256, S. Stroux, above note 2, pp. 737-738 and P. Fernandez, above note 8, pp. 648-649.

¹⁰ *Laurent Piau v. Commission* (Case T-193/02 [2005], ECR II-209 [2005]) para. 110 and *Compagnie Maritime Belge* para. 36. See also, B. Hawk and G. Motta, above note 4, p. 84.

internal relationship of the undertakings forming the collective entity in order for such firms to behave in an identical or similar manner on the market¹¹. However, the total elimination of competition is unnecessary, since the formation of a collective entity requires that the undertakings should not compete in relation to at least one parameter of competition, for example prices, while the existence of some competition on factors other than price does not per se preclude a finding of a collective position¹².

(II) Collective Dominant Position

The second condition of the Article 102 test focuses on the demonstration of dominance. In particular, the establishment of a collective dominant position requires an economic assessment of the relevant industry where the emphasis is on the determination of whether the undertakings jointly hold substantial market power as this is defined in economics¹³. Thus, according to the definition developed under Article 102, two or more undertakings are collectively dominant if they enjoy a position of economic strength which

¹¹ H. Haupt, *Collective Dominance Under Article 82 E.C. And E.C. Merger Control In The Light Of The Airtours Judgment*, E.C.L.R., 2002, 23(9), 434-444, pp. 437 and 439.

¹² *TACA I* para. 522, *Atlantic Container Line AB And Others v. Commission (TACA II)* (Cases T-191 and 212-214/98 [2003], ECR II-3275 [2003], 5 CMLR 1283 [2005]) paras 653-654 and *Compagnie Maritime Belge* Opinion para. 34. See also, G. Monti, above note 4, p. 137, S. Preece, above note 8, p. 390, S. Stroux, above note 5, p. 99, D. Geradin et al., above note 9, p. 23 and J. Lang, *Oligopolies And Joint Dominance In Community Antitrust Law*, In: *Annual Proceedings Of The Fordham Corporate Law Institute - International Antitrust Law And Policy 2001*, Edited By B. Hawk, 2002, 269-359, p. 315.

¹³ S. Bishop and P. Marsden, *The Article 82 Discussion Paper: A Missed Opportunity*, E.C.J., 2006, 2(1), 1-7, p. 2., M. Vatterio, *An Institutional Explanation Of Joint Dominance*, *World Competition*, 2009, 32(2), 221-226, p. 222, Ş. Ardiyok, *Comparative Analysis Of Collective Dominance*, 2006, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1162187, 1-39, p. 21 and G. Monti, *The Concept Of Dominance In Article 82*, E.C.J., 2006, Supplement, 31-52, p. 38.

enables them to hinder the maintenance of effective competition on the relevant market by affording them the power to behave to an appreciable extent independently of their competitors, their customers and their consumers¹⁴. It follows that there are two elements in this definition which constitute indicators of a collective dominant position. Firstly, the undertakings must have the ability to prevent effective competition from being maintained in the relevant market by distorting the competitive process¹⁵. Secondly, the undertakings must have the power to behave to an appreciable extent independently of the external competitive forces, i.e. they are not required to be absolutely free from such competitive constraints but that freedom must be significant, while this condition principally refers to their ability to profitably raise their prices substantially above the competitive level¹⁶. However, these two elements overlap to the extent that they are simply regarded as one and the same thing,

¹⁴ *Italian Flat Glass* para. 358, *Piau* para. 109, *TACA I* para. 532, *Compagnie Maritime Belge* para. 34, *United Brands* (Case C-27/76 [1978], ECR 207 [1978], 1 CMLR 429 [1978]) para. 65, *Hoffmann La Roche* (Case C-85/76 [1979], ECR 461 [1979], 3 CMLR 211 [1979]) para. 38 and Guidance Paper (Communication From The Commission - Guidance On The Commission's Enforcement Priorities In Applying Article 82 Of The EC Treaty To Abusive Exclusionary Conduct By Dominant Undertakings, 2009, OJ C45/7 [2009], available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:045:0007:0020:EN:PDF>) para. 10. See also, D. Geradin et al., above note 9, p. 2, S. Stroux, above note 5, p. 87, G. Monti, above note 4, p. 136, K. Bacon, *State Regulation Of The Market And EC Competition Rules: Articles 85 And 86 Compared*, E.C.L.R., 1997, 18(5), 283-291, p. 290, F. Bektashi, above note 4, pp. 18-19 and F. Mezzanotte, *Tacit Collusion As Economic Links In Article 82 EC Revisited*, E.C.L.R., 2009, 30(3), 137-142, p. 138.

¹⁵ D. Geradin et al., above note 9, p. 4.

¹⁶ Guidance Paper para. 11. See also, Competition Law Forum Article 82 Review Group, *The Reform Of Article 82: Comments On The DG-Competition Discussion Paper On The Application Of Article 82 To Exclusionary Abuses*, E.C.J., 2006, 2(1), 169-178, p. 175 and F. Mezzanotte, *Can The Commission Use Article 82 EC To Combat Tacit Collusion?*, CCP Working Paper 09-5, 2009, available at http://www.uea.ac.uk/polopoly_fs/1.111282!ccp09-5.pdf, 1-36, pp. 9-10.

because they both refer to instances of market power and the Courts have never drawn any distinction between them¹⁷. Lastly, the Commission's analysis focuses on the structural characteristics of the relevant industry in order to assess whether the undertakings collectively possess the market power to distort the competitive process and behave to an appreciable extent independently of the external competitive constraints¹⁸.

(III) Abuse

The existence of a collective dominant position is not in itself sufficient to establish a violation of Article 102, since this provision punishes a group of firms only if they are engaging in abusive behaviour¹⁹. Article 102 lists four non-exhaustive courses of conduct that may be abusive and the collective dominant firms may in principle exercise such anticompetitive behaviour either by exploiting their position in order to gain supra-competitive profits, i.e. exploitative abuses, or by driving the other competitors out of the market, i.e. exclusionary abuses²⁰.

(2) Tacit Collusion

¹⁷ D. Geradin et al., above note 9, p. 3.

¹⁸ B. Allan, Article 82 - A Commentary On DG Competition's Discussion Paper, C.P.I., 2006, 2(1), 43-82, pp. 51-52, H. Haupt, above note 11, pp. 438-439, T. Feaster and P. Treacy, above note 4, p. 469, Competition Law Forum Article 82 Review Group, above note 16, p. 175 and No Cited Author, Case Comment - *Compagnie Maritime Belge Transports SA v. Commission Of The European Communities*, E.L.Rev., 1997, 22 Supp., CC42-54, p. 47.

¹⁹ M. Jephcott and C. Withers, above note 1, p. 296, F. Depoortere and G. Motta, above note 1, p. 4 and M. Vatiero, above note 13, p. 222.

²⁰ *Compagnie Maritime Belge* para. 112. See also, P. Fernandez, above note 8, p. 648, Ş. Ardiyok, above note 13, p. 31, S. Stroux, above note 5, pp. 87-88, F. Mezzanotte, above note 14, p. 137 and J. Lang, above note 12, pp. 335-336.

(I) Collusion Under Article 102 Collective Dominance

Article 102 has been interpreted so as to encompass the abuse of collective dominance within its ambit by relying on its reference to ‘one or more undertakings’ and such a provision may theoretically regulate the abusive conduct by the members of a collective entity which do not only explicitly but also tacitly collude²¹. However, the relevant precedent reveals that in each collective dominance case examined under Article 102, the Commission and the Courts held that the connection between the firms acting as a collective entity was established by the implementation of an agreement to participate in the industry’s conference, trade association or regulatory body, whilst there is no decision where the connecting factor was inferred from the existence of mere oligopolistic interdependence²². Therefore, the past precedent demonstrates that in practice the Commission and the Courts have focused on the regulation of the abusive conduct by explicitly colluding firms, while on the contrary tacit

²¹ S. Stephanou, *Collective Dominance Through Tacit Coordination: The Case For Non-Coordination Between Article 82 And Merger Control ‘Collective Dominance’ Concepts*, G.C.P., 2009, October, 1-8, p. 4.

²² *Compagnie Maritime Belge* paras 46-48, *CEWAL* (Cases IV/32.448 and 32.450 [1992], OJ L34/20 [1993], 5 CMLR 198 [1995]) para. 49, *TACA I* paras 525-531, *TACA II* paras 598-602, *French-West African Shipowners’ Committee* (Case IV/32.450 [1992], OJ L134/1 [1992], 5 CMLR 446 [1993]) paras 56-58, *Almelo* paras 43 and 45, *Piau* paras 113-114 and Discussion Paper para. 76. See also, D. Geradin et al., above note 9, p. 27, H. Haupt, above note 11, p. 438, B. Hawk and G. Motta, above note 4, pp. 79 and 103, A. Onuma, above note 4, p. 16, A. Winckler and M. Hansen, *Collective Dominance Under The EC Merger Control Regulation*, C.M.L.R., 1993, 30, 787-828, pp. 800-802, T. Soames, *An Analysis Of The Principles Of Concerted Practice And Collective Dominance: A Distinction Without A Difference?*, E.C.L.R., 1996, 17(1), 24-39, p. 37, F. Mezzanotte, above 14, p. 139 and F. Mezzanotte, above note 16, pp. 12-14.

collusion has not played any role at all in the enforcement of collective dominance under Article 102²³.

The Commission's and the Courts' tendency to focus exclusively on the control of explicit collusion could have been altered by the application of the GC's dictum in *Laurent Piau v. Commission*. In *Piau* the GC incorporated the *Airtours* test as established in the analysis of collective dominance in mergers to the assessment of the abuse of collective dominance under Article 102 and accordingly it extended the mutual correspondence between these two concepts that was evident by the judgments in *Gencor* and *Compagnie Maritime Belge* where the Courts concurred on the possibility that oligopolistic interdependence may form the relevant connecting factor²⁴. The *Piau* dictum constituted an important development as, even though the case in itself was not decided on the basis of tacit collusion, the GC employed the Commission with the legal test necessary to effectively address such conduct and it opened up the potential to regulate tacit collusion in the context of Article 102 collective dominance²⁵. Notably, such a test was subsequently reiterated in the Discussion Paper's analysis of collective dominance under Article 102²⁶.

²³ N. Petit and D. Henry, Why The EU Merger Regulation Should Not Enjoy A Monopoly Over Tacit Collusion – A Close Look At Five Common Misconceptions, In: *Changes In Competition Policy Over The Last Two Decades*, 2010, available at <http://www.uokik.gov.pl/download.php?plik=8562>, 181-197, p. 182.

²⁴ *Piau* para. 111.

²⁵ N. Petit and D. Henry, above note 23, pp. 182-183 and D. Geradin, Oligopoly Control After *Laurent Piau* And *Tetra Laval* – Shifting Paradigm Or Just The Same Old Song?, 2005, available at http://professorgeradin.blogs.com/professor_geradins_weblog/2005/03/oligopoly_contr.html (last visited 21/06/2011), 1-2, p. 1.

²⁶ Discussion Paper paras 47-50.

Nonetheless, the Guidance Paper on exclusionary abuses departed from the Discussion Paper, as it did not contain any provisions that focused on the abuse of collective dominance and this ‘omission’ must be interpreted as an acknowledgment that the regulation of the abuse of such positions is not within the Commission’s enforcement priorities in exclusion cases examined under Article 102²⁷. Such a position is compatible with the analysis prescribed in the Horizontal Merger Guidelines which, even though in the assessment of unilateral effects they shed focus on the likelihood that the merged entity could behave in an exclusionary manner, they did not contain any analogous provision in the examination of coordinated effects²⁸. Thus, it can be inferred from both the Guidance Paper and the Horizontal Merger Guidelines that the Commission’s focus on exclusionary behaviour is principally related to the assessment of an individual firm’s market conduct, while in collective dominance cases its primary emphasis is on exploitative pricing behaviour²⁹. Accordingly, the lack of focus on collective dominance under the Guidance Paper does not offer any general policy observations, such as an indication of the Commission’s tendency to possibly abandon the enforcement of such a concept altogether. Nevertheless, the absence of provisions on collective dominance under the Guidance Paper clearly illustrates the

²⁷ Guidance Paper para. 4. See also, N. Petit and D. Henry, above note 23, p. 182, F. Depoortere and G. Motta, above note 1, pp. 2 and 4 and L. Vitzilaiou and C. Lambadarios, above note 6, p. 10.

²⁸ Horizontal Merger Guidelines para. 36. See also, G. Monti, *The New Substantive Test In The EC Merger Regulation – Bridging The Gap Between Economics And Law?*, LSE Law, Society And Economy Working Papers, 2008, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1153661, 1-21 pp. 13-14.

²⁹ This position is precisely reflected by Hemphill and Wu which state that ‘our experience suggests that enforcement agencies may decline to even consider the investigation of exclusionary conduct if practiced by multiple firms’ and that exclusion ‘is broad enough to embrace exclusion by multiple incumbents, but in practice it has often been limited to exclusion by a single, dominant firm’. See also, S. Hemphill and T. Wu, *Parallel Exclusion*, Yale Law Journal, 2013, available at http://awards.concurrences.com/IMG/pdf/parallel_exclusion_yale_law_journal.pdf, 1182-1253, pp. 1187-1188.

Commission's continued and ongoing lack of emphasis on enforcement against tacit collusion, as the control of such conduct is evidently outside its priorities. Lastly, it is notable that, in contrast to the absence of emphasis in the Horizontal Merger Guidelines as well as in the relevant past precedent, exclusionary behaviour can (and should) form part of the analysis in collective dominance merger cases under the theory of 'parallel exclusion'.

(II) Conceptual Overlap On Tacit Collusion

The concepts of collective dominance under Article 102 and collective dominance under the Merger Regulation are convergent in their theoretical substance on tacit collusion. In particular, both concepts include tacit collusion within their boundaries and the Commission would apply an identical test for its establishment. On the one hand, the *Piau* dictum opened up the possibility to address tacit collusive conduct in an Article 102 collective dominance context of assessment. Thus, the GC converged the substance of the concept of collective dominance under Article 102 to the concept of collective dominance under the Merger Regulation, as both concepts include situations of tacit collusion within their ambit³⁰. On the other hand, the *Piau* dictum converged the test that is applicable in order to establish tacit collusion under both concepts. Specifically, in the appraisal of collective dominance merger cases the fulfilment of the *Airtours* test demonstrates the likelihood of tacit collusion post-merger, whilst in the assessment of Article 102 collective dominance cases the establishment of tacit collusion would also be based on the proof of the cumulative presence of the *Airtours* conditions³¹. Additionally, the cumulative establishment of the *Airtours* conditions would facilitate the Commission to fulfil at least the first and second

³⁰ Note also the discussion on the relationship between tacit collusion and the concept of collective dominance under the Merger Regulation at Ch. 2.

³¹ Note also the discussion on the *Airtours* conditions at Ch. 2.

element of the Article 102 three-prong test. Firstly, the establishment of the condition focusing on a common policy of tacit collusion would presuppose the existence of a connecting factor in the form of oligopolistic interdependence. Also, the establishment of the conditions revolving around a common policy, transparency and retaliation would imply the absence of effective internal competition between the oligopolists. Therefore, the fulfilment of these *Airtours* conditions would lead to the conclusion that the undertakings present themselves or act as a collective entity on the market and accordingly they would satisfy the collective position criterion under the Article 102 test. Secondly, the establishment of the condition emphasising on the absence of countervailing power of competitors, customers and consumers would necessitate the lack of effective external competition. Moreover, the cumulative establishment of all the *Airtours* conditions would lead to a finding of a sustainable tacit collusive policy, which would enable the undertakings to impair effective competition in the relevant market. Thus, in such a situation the oligopolists would possess significant market power, whilst the relevant structural characteristics would be favourable towards such an outcome, and consequently the collective dominant position criterion under the Article 102 test would be fulfilled. Lastly, in those circumstances where the market structure allows the oligopolists to collude tacitly and enjoy a collective dominant position, any conduct exploiting that market would in fact exploit their position and would lead to a finding of abuse. For example, the typical effect of tacit collusion that consists of the imposition of supra-competitive prices in the market would constitute abuse of collective dominance on the basis of an excessive pricing conduct.

Nevertheless, despite such conceptual overlap, in the enforcement of each legal concept the emphasis is on the control of different types of collusion. Thus, even though the past precedent illustrates that the Commission's and the Courts' emphasis is on the control of

tacit collusion in the application of the concept of collective dominance under the Merger Regulation, in the enforcement of Article 102 collective dominance their focus is on the regulation of explicit collusion, while on the contrary there is total lack of precedent tackling tacit collusive conduct and the *Piau* dictum has not been applied yet in an actual case examination. At first sight, such a conceptual overlap but distinctive enforcement on tacit collusion would appear to be a paradox. Nevertheless, it is explainable by the specific features that would underline an Article 102 collective dominance analysis centred on tacit collusion.

(III) Distinctive Enforcement On Tacit Collusion And The Reasons For Such Divergence

Proof

The principal reason for the absence of Article 102 enforcement against tacit collusion relates to the applicability of a higher evidentiary threshold in the assessment of collective dominance cases under Article 102 in relation to the threshold of proof employed in mergers. Specifically, in the examination of collective dominance under the Merger Regulation the Commission adopts an ex-ante analysis and this predictive nature of the assessment leads to the adoption of a flexible standard of proof that is based on probabilities, which due to the strictness of the *Airtours* test it is adjusted upwards at a ‘reasonable likelihood’ threshold³².

³² Note also the discussion on the prospective analysis applied in the assessment of collective dominance merger cases and the reasonable likelihood threshold at Ch. 8. See also, B. Vesterdorf, *Standard of Proof In Merger Cases : Reflections In The Light Of Recent Case Law Of The Community Courts*, E.C.J., 2005, 1(1), 3-33, p. 27, D. Bailey, *Standard Of Proof In EC Merger Proceedings: A Common Law Perspective*, C.M.L.R., 2003, 40, 845-888, pp. 869 and 874-875, H. Haupt, above note 11, p. 438, J. Lang, above note 12, pp. 270 and 311, A. Scott, ‘An Immovable Feast’?: Tacit Collusion And Collective Dominance In Merger Control After *Airtours*, CCR Working Paper CCR 02-6, 2006, available at http://www.uea.ac.uk/polopoly_fs/1.104458!ccr02-6.pdf, 1-

Conversely, three factors point towards the applicability of a higher standard of proof in the potential enforcement against tacit collusion cases under the Article 102 collective dominance concept and these relate to the ex-post nature of the assessment, the quasi-criminal nature of infringements and the increased stringency related to the establishment of the *Airtours* factors in an ex-post context. On the one hand, even though in Article 102 cases the requisite legal standard has never been explicitly stated, the ex-post nature of the appraisal and the presumed availability of evidence that is related to the fact that the assessment would focus on whether the undertakings concerned have actually abused their collective dominant position in the past (as opposed to future predictions) makes it possible to aim at a higher degree of cognition and leads to the application of a more rigorous standard of proof in relation to the threshold of proof employed in the examination of mergers³³. On the other hand, such a higher threshold of proof is correlated to the fact that, in contradiction to merger cases which are administrative in nature and especially in horizontal concentrations there is no presumption of compatibility with the Common Market due to the employment of a symmetrical standard of proof, Article 102 cases relate to infringements that involve penalties of a quasi-criminal nature for which the principle of the ‘presumption of innocence’ is applicable and could even justify a standard close to the ‘beyond reasonable doubt’

21, pp. 13-14, Y. Botteman, *Mergers, Standard Of Proof And Expert Economic Evidence*, J.C.L.&E., 2006, 2(1), 71-100, p. 77, D. Geradin et al., above note 9, p. 28 and S. Stephanou, above note 21, p. 7.

³³ E. Fournier, *The Elusive Standard Of Proof In EU Competition Cases*, *World Competition*, 2010, 33(2), 187-207, p. 196, D. Geradin et al., above note 9, p. 28, L. Vitzilaiou and C. Lambadarios, above note 6, p. 9, D. Bailey, above note 32, pp. 868 and 874, S. Stroux, above note 4, p. 4, H. Haupt, above note 11, p. 438, J. Lang, above note 12, p. 270 and N. Petit, *The ‘Oligopoly Problem’ In EU Competition Law*, 2012, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1999829, 1-78, pp. 59-61.

threshold employed in criminal law cases³⁴. Nevertheless, such a standard is adjusted at a high degree of likelihood, because in Article 102 cases the Courts have consistently upheld and practically applied a limited review of the Commission's complex economic assessments that are subject to a manifest error standard and accordingly they have recognised at least to some extent its margin of discretion in such matters, which means that the threshold of proof should be accommodated accordingly due to the interaction between those components of proof³⁵. Most importantly, the inherently strict evidentiary requirements related to the establishment of the cumulative *Airtours* conditions combined with an ex-post context of assessment forms an onerous burden for the Commission. This becomes evident by the consideration that the requirement to establish such criteria has created complexities even under the more lenient ex-ante review and accordingly those conditions would be much more difficult to fulfil in a more demanding ex-post context of assessment where the Commission would be obliged to demonstrate the direct fulfilment of the *Airtours* criteria by the

³⁴ Note also the discussion on the symmetrical standard of proof at Ch. 8. See also, P. Hellstrom, A Uniform Standard Of Proof In EU Competition Proceedings, 2009, available at <http://www.eui.eu/Documents/RSCAS/Research/Competition/2009/2009-COMPETITION-Hellstrom.pdf>, 1-9, p. 6 and B. Vesterdorf, above note 32, p. 27.

³⁵ *Kingdom of Spain v. Commission* paras 60-61 (Case T-398/07 [2012], ECR II-000 [2012]), *AstraZeneca v. Commission* para. 32 (Case T-321/05 [2010], ECR II-2805 [2010]) and *Microsoft v. Commission* paras 87-88 (Case T-201/04 [2007], ECR II-3601 [2007]). Note also the discussion on the interrelationship between the standard of proof and judicial review at Ch. 8. See also, M. Melicias, 'Did They Do It? The Interplay Between The Standard Of Proof And The Presumption Of Innocence In EU Cartel Investigations, World Competition, 35(3), 2012, 471-510, p. 505, E. Paulis, The Burden Of Proof In Article 82 Cases, Fordham Conference, 2006, available at http://ec.europa.eu/competition/speeches/text/sp2006_014_en.pdf, 1-9, p. 1 and D. Geradin and N. Petit, Judicial Review In European Union Competition Law: A Quantitative And Qualitative Assessment, 2010, available at http://orbi.ulg.ac.be/bitstream/2268/143359/1/GERADIN_PETIT_Judicial%20Review.pdf, 1-39, p. 22.

presentation of pragmatic evidence on each condition and every market characteristic due to the cumulative nature of such conditions, whilst in order to establish an infringement it would also have to satisfy the abuse element. The distinctive and more onerous evidentiary requirements that must be presented in an ex-post as opposed to an ex-ante context of assessment are illustrated by the fact that in Article 102 tacit collusion cases a ‘specific’ retaliation mechanism would have to be demonstrated by showing past instances of deviation and consequent punishment, whilst in the assessment of collective dominance under the Merger Regulation the Commission does not have to prove the presence of a specific retaliation mechanism post-merger, but it must merely provide sufficient evidence that adequate deterrents would exist³⁶. Overall, if one attempts to weigh these three factors, it is obvious that the stringency of the *Airtours* test plays the most prominent role on the upwards adjustment of the standard of proof towards the highest degree of probabilities, i.e. an ‘all likelihood’ threshold, and the hindrance of enforcement against tacit collusion under the Article 102 collective dominance concept, as the mere presence of the other two features is common in Article 102 investigations, but it has not barred effective deterrence against alternative types of anticompetitive conduct.

A solution to this problem may be found by the application of the *Impala* indirect test which could introduce a degree of flexibility in the demonstration of tacit collusion in collective dominance cases under Article 102. As a preliminary point it should be noted that the indirect test is theoretically capable to be applied in the analysis of Article 102 collective dominance, because it relies on past conduct in order to establish pre-existing collective

³⁶ Note also the discussion on the proof of retaliation in mergers at Ch. 8. See also, D. Geradin et al., above note 9, p. 28 and F. Mezzanotte, Using Abuse Of Collective Dominance In Article 102 TFEU To Fight Tacit Collusion: The Problem Of Proof And Inferential Collusion, *World Competition*, 2010, 33(1), 77-102, p. 93.

dominance and it requires the Commission to prove actual tacit collusive behaviour, which is compatible with the ex-post examination of collective dominance in Article 102 cases and the type of analysis employed under such a provision³⁷. From a substantive point of view the employment of the *Impala* test to Article 102 collective dominance cases would deprive the establishment of tacit collusion from the necessity to fulfil the *Airtours* factors directly, as each one or all of those criteria could be established indirectly through the fulfilment of the *Impala* conditions and accordingly it would facilitate the Commission to discharge its burden of proof by transfusing some needed flexibility from the realm of merger assessment³⁸. Such flexibility is evident by the fact that under the *Impala* test there would be no need to demonstrate a ‘specific’ retaliation mechanism as such a factor could be inferred indirectly in the situation where the Commission would establish the cumulative presence of the *Impala* conditions³⁹. Furthermore, in the context of Article 102 the fulfilment of the *Impala* test may simultaneously establish not only that the observed conduct is tacitly collusive, but also that it is abusive. Therefore, if the Commission would initially establish tacit collusion through the fulfilment of the *Impala* test, then the simultaneous proof of the first *Impala* condition that incorporates the conduct-related element of high parallel prices held over time, could demonstrate that the tacitly colluding firms had also abused their collective dominant position by engaging in exploitative abuses⁴⁰. Nevertheless, a potential problem in the application of the *Impala* indirect test in such a context relates to the establishment of its third condition which is associated with the ‘problem of identification’ faced by the Commission in Article 102 cases, i.e. it must prove that tacit collusion and not another explanation, such as

³⁷ Note also the discussion on the focus of the *Impala* indirect test on past market conduct at Ch. 2.

³⁸ Note also the discussion on the flexibility of the indirect test at Ch. 2.

³⁹ Note also the discussion on the ability to indirectly establish each one or all of the *Airtours* criteria at Ch. 2.

⁴⁰ In that regard the Commission would have to produce evidence such as a systematic pattern of prices which are not determined by external demand and supply shocks.

unconscious parallelism, was the cause of the firms' observed conduct⁴¹. However, since the Commission does not have to prove its case at a 'beyond reasonable doubt' threshold in Article 102 cases, it is not required to establish at a high level of certainty that tacit collusion was the underlying reason for the observed parallel behaviour, but it must positively prove at a high degree of likelihood that such conduct forms the explanation for the observed parallel behaviour⁴². Specifically, such a requirement must be interpreted in light of the *Sony* judgment where the ECJ examined the situation of pre-existing collective dominance under the Merger Regulation by employing an analysis which had common elements to an Article 102 assessment and this is evident by the fact that it cited *Compagnie Maritime Belge* as a legal precedent relevant in this type of examination⁴³. In *Sony* the ECJ shed emphasis on the fact that in the application of the *Impala* test the Commission is required to 'adopt an approach based on the analysis of such plausible coordination strategies as may exist in the circumstances'⁴⁴. The applicability of this requirement of 'plausibility', as established by the ECJ in the context of an ex-post assessment that is relevant not only in the examination of pre-existing collective dominance in mergers, but also in Article 102 cases, must be interpreted as extending beyond the relevant coordination strategies to the actual application of the *Impala* test and specifically on its third condition thereby excluding the necessity to prove such a criterion at a high degree of certainty and leaving to the Commission a degree of flexibility in the establishment of tacit collusion through the indirect test.

⁴¹ F. Mezzanotte, above note 36, p. 77, N. Petit, above note 33, p. 62, T. Vecchi, above note 3, p. 388 and G. Monti, above note 4, pp. 144-146 and 152.

⁴² N. Petit, above note 33, pp. 62-63.

⁴³ *Sony* para. 119.

⁴⁴ *Sony* para. 129.

The more lenient threshold of proof employed in collective dominance merger cases currently renders such a framework preferable to Article 102 in order to tackle tacit collusion, despite its complexities, and explains the development of this concept towards the specific aim to control such anticompetitive conduct. This position is reinforced by the formal availability to employ the *Impala* indirect test in the assessment of the strengthening of pre-existing collective dominance that derives from the recognition of its validity by the ECJ in *Sony*. Nevertheless, it seems that the *Impala* indirect test is suitable to be applied in an Article 102 collective dominance context and accordingly it could prospectively introduce a more flexible era and facilitate the enforcement against tacit collusion in such a context.

Effects-Based Approach

The lack of enforcement against tacit collusion under Article 102 is also related to the absence of implementation of an effects-based approach in such a context. Specifically, even though the Commission's Guidance Paper introduced a new era that focused on consumer harm as the overall criterion relevant in the determination of abusive behaviour and it endorsed an effects-based approach in the examination of whether a given practice is detrimental to consumer welfare, the GC still relies on a formalistic analysis and is reluctant to embrace an effects-based approach within the realm of Article 102, since it restates the traditional precedent whereby the effects of the contested practices do not have to be demonstrated in order to establish an infringement⁴⁵. As a matter of principle, this framework

⁴⁵ Guidance Paper paras 2, 5 and 19, *Tomra v. Commission* (Case T-155/06 [2010], ECR II-000 [2010]) paras 16 and 219 and *France Telecom v. Commission* (Case T-340/03 [2007], ECR II-00107 [2007]) para. 195. See also, G. Zohios, Commission Guidance Paper On The Application Of Article 82: A Step Towards Modernization Or A Step Away?, G.C.P., 2009, February, 1-7, p. 4, Y. Botteman and K. Ewing, Guidance On Enforcement Priorities Regarding Exclusionary Abuses: A Comparative Overview, G.C.P., 2009, February, 1-15, p. 5, J. Gual, M. Hellwig, A. Perrot, M. Polo, P. Rey, K. Schmidt and R. Stenbacka, An Economic Approach

of analysis is contradictory to the assessment employed in *Airtours* where the GC made clear that the application of a more-economic and effects-based approach linked to a consumer welfare standard underlines the assessment of concentrations for tacit collusion, which means that the examination of such conduct can only be undertaken in that specific context, as opposed to a context underlined by a form based approach⁴⁶. However, the recent *Post Danmark v. Konkurrenceradet* judgment signals a change of analysis, since the ECJ leaned towards an effects-based approach by explicitly clarifying that the core criterion to determine abusive conduct under Article 102 is its anticompetitive effects ‘on competition, and thereby on the consumers’ interests’⁴⁷. Thus, it is submitted that this apparent increased willingness to implement a modernised framework of assessment, especially if combined with the recent restatement of the *Airtours* criteria in *EFIM v. Commission*, may also open up a new era in the potential enforcement against tacit collusion under Article 102⁴⁸.

Remedies

To Article 82, Report By The EAGCP, 2005, available at http://ec.europa.eu/dgs/competition/economist/eagcp_july_21_05.pdf, 1-53, p. 3, Y. Katsoulacos, Some Critical Comments On The Commission’s Guidance Paper On Article 82 EC, G.C.P., 2009, February, 1-11, pp. 5-6, F. Etro and I. Kokkoris, An Economic Approach To Abuse Of Dominance, 2010, available at <http://dipeco.economia.unimib.it/repec/pdf/mibwpaper190.pdf>, 1-47, pp. 1, 37 and 43 and D. Geradin and N. Petit, above note 35, pp. 2, 31, 34 and 38.

⁴⁶ Note also the discussion on the *Airtours* direction towards a more economic and effects-based approach at Ch. 4.

⁴⁷ *Post Danmark A/S v. Konkurrenceradet* (Case C-209/10 [2012], ECR I-0000 [2012]) para. 44. See also, E. Rousseva and M. Marquis, Hell Freezes Over: A Climate Change For Assessing Exclusionary Conduct Under Article 102 TFEU, *Journal Of European Competition Law & Practice*, 2012, available at <http://jeclap.oxfordjournals.org/content/early/2012/10/25/jeclap.lps059.full.pdf>, 1-19 , p. 11.

⁴⁸ *EFIM v. Commission* (Case T-296/09 [2011], ECR II-00425 [2011]) para. 71.

An aggregating reason for the lack of enforcement against tacit collusion under Article 102 relates to the fact that, even if the Commission would be able to discharge its burden of proof by demonstrating such conduct, it would face difficulties in fashioning an appropriate and effective remedy. On the one hand, behavioural remedies form the preferable solution in Article 102 decisions, but they are problematic to the extent that they require continuous monitoring that would essentially put the Commission in the undesirable position to act as a regulatory body, especially if the infringing parties would undertake commitments not to charge excessive prices that would also involve complexities on the determination of the appropriate price level, whilst their effectiveness is questionable for the reason that they would not directly target the root of the problem in tacit collusion cases which is correlated to the relevant market structure⁴⁹. On the other hand, structural remedies are generally considered to be an unsuitable solution in Article 102 cases, since they are only employed if it is not possible to use behavioural commitments, and particularly in collective dominance cases they are perceived as a risky and aggressive intervention to the market structure which leads to the result that they would only be employed in exceptional circumstances⁵⁰. Lastly, alternative sanctions such as punishment measures in the form of fines are ineffective to

⁴⁹ Article 7(1) and Recital 12 Regulation (EC) No 1/2003 On The Implementation Of The Rules On Competition Laid Down In Articles 81 And 82 Of The Treaty, 2002, available at <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32003R0001>. See also, B. Hawk And M. Motta, above note 4, p. 64, E. Wind, Remedies And Sanctions In Article 82 Of The EC Treaty, E.C.L.R., 2005, 26(12), 659-668, p. 560 and G. Monti, above note 4, p. 145.

⁵⁰ Article 7(1) and Recital 12 Regulation 1/2003. See also, B. Hawk And M. Motta, above note 4, p. 64, M. Zymler, Tacit Collusion: A Solution In Search Of A Problem, 2011, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1751545, 1-9, p. 8, N. Petit, above note 33, p. 44 and G. Monti, above note 4, pp. 146 and 157.

restore competition and do not put the infringement to an end⁵¹. This uncertainty as to whether an appropriate and effective remedy would be available in order to eliminate the abusive conduct of tacitly colluding firms would render the Commission very sceptical to initiate an examination of such anticompetitive concerns, bearing in mind the length and costs of Article 102 investigations, whilst this position is aggregated especially by the marginal availability of structural commitments which contradicts the position under the Merger Regulation where these remedies are both available and optimal in tacit collusion cases, a factor which makes the framework of collective dominance in mergers more suitable to tackle such conduct⁵². Nevertheless, such a problem could be solved if the Commission would be willing to lift its precautions and seed greater emphasis on structural remedies in the specific context of tacit collusion cases under Article 102. In particular, the Commission should recognise that structural commitments would be the optimal solution in situations of tacit collusion due to the inextricable link of collusive conduct to the relevant market structure and thereby effectively implement the position employed in mergers within the context of Article 102.

(3) Exclusion

Despite the absence of any relevant provision in the Guidance Paper, the past precedent illustrates that a collective dominant group may sometimes violate Article 102 by engaging not in exploitative, but in exclusionary abuses, through the adoption of a variety of practices that aim to deny rivals access to a raw material or technology, cut off their access to

⁵¹ P. Hellstrom, F. Maier-Rigaud and F. Bulst, Remedies In European Antitrust Law, *Antitrust Law Journal*, 76, 2009, 43-63, pp. 44-45.

⁵² Note also the discussion on the preference for structural remedies in the context of collective dominance under the Merger Regulation at Ch. 5.

customers or otherwise raise their costs⁵³. On the contrary, in horizontal mergers assessed for collective dominance the Commission's focus is exclusively on the likelihood of anticompetitive parallel price increases and this exposes an enforcement gap under the Merger Regulation that relates to the situation of parallel exclusion. Specifically, there can be exclusionary effects resulting from a horizontal merger, since if such a concentration improves the ability or raises the likelihood of the remaining firms to engage in parallel exclusion, i.e. conduct engaged uniformly by multiple firms within an oligopoly that harms competition by blocking the entry of a potential competitor or by inducing the exit of an existing rival, this would lead to the prohibition of the transaction on the basis of coordinated effects⁵⁴. In particular, implicit coordination of exclusionary practices is possible, since even though tacit collusion is mainly focused on price elevation, it embraces a variety of strategies and can include exclusionary schemes⁵⁵. Thus, firms in an oligopoly may collude in order to exclude, whilst the objective of parallel exclusion may be either to sustain higher prices or to slow/block innovation and especially the likelihood that a concentration may cause this later

⁵³ For example, in *Compagnie Maritime Belge* the ECJ held that the collective dominant group aimed to achieve the exclusion of its rivals by the simultaneous use of several types of abusive conduct. See also, E. Iacobucci and R. Winter, Abuse Of Joint Dominance In Canadian Competition Policy, University Of Toronto Law Journal, 2010, available at http://www.law.utoronto.ca/utfl_file/count/documents/iacobucci/Iacobucci%20-%20Abuse%20-%20UTLJ.pdf, 219-237, p. 220 and S. Hemphill and T. Wu, above note 29, p. 1239.

⁵⁴ For example, the issue of parallel exclusion was raised in the assessment of the US horizontal merger between *AT&T* and *T-Mobile*. See also, S. Hemphill and T. Wu, above note 29, pp. 1186, 1236 and 1248-1250, S. Besen, S. Kletter, S. Moresi, S. Salop and J. Woodbury, An Economic Analysis Of The *AT&T-T-Mobile* USA Wireless Merger, Journal Of Competition Law And Economics, 2013, 9(1), 23-47, pp. 24 and 35-36, A. Grunes and M. Stucke, Antitrust Review Of The *AT&T/T-Mobile* Transaction, Federal Communications Law Journal, 2011-2012, 64, 47-85, pp. 75-79 and E. Iacobucci and R. Winter, above note 53, p. 231.

⁵⁵ E. Iacobucci and R. Winter, above note 53, p. 221 and S. Hemphill and T. Wu, above note 29, pp. 1188 and 1190.

type of adverse non-price effects reveals the critical importance for the Commission to employ outmost attention on parallel exclusion, as diminished innovation is considered to result in more detrimental impact on the consumers in the long run than price increases⁵⁶. For a finding of coordinated effects on the basis of parallel exclusion the Commission must establish that after the completion of the concentration the oligopolists would have the ability and the incentive to adopt and sustain a strategy directed towards the exclusion of their actual or potential rivals. On the one hand, the oligopolists would have the incentive to adopt a parallel exclusion scheme if such a strategy would be advantageous for each one of those firms, whilst the ability to identify and implement such a scheme may be straightforward as each firm would either engage or refrain to engage in a specific exclusionary practice, i.e. the adoption of a parallel exclusion strategy could present less complexities than if the oligopolists would have to choose a specific price level that would be suitable for each and every member of the coordinating group⁵⁷. On the other hand, the oligopolists' ability as well as their incentive to sustain a strategy of parallel exclusion is facilitated by the fact that cheating in the form of allowing the entry of a new competitor would normally be

⁵⁶ Note that there is a qualitative difference between collusion in innovation as identified at Ch. 4 and the exclusion of innovative firms discussed above. Specifically, under the former scenario the oligopolists would collude in order to diminish 'internal' innovative efforts, i.e. innovation generated by firms within the collusive group, whilst in the second scenario the market participants would collude in order to exclude 'external' innovative efforts from the relevant market, i.e. innovation generated by actual or potential competitors. In both situations the end objective is identical, i.e. to replicate the enjoyment of the 'quiet life' of a monopolist at the expense of the consumers. See also, S. Hemphill and T. Wu, above note 29, pp. 1182, 1185 and 1210-1211 and J. Baker, Exclusion As A Core Competition Concern, 2012, available at <http://www7.luc.edu/media/lucedu/law/centers/antitrust/pdfs/events/baker.pdf>, 1-73, pp. 34 and 61.

⁵⁷ J. Rybníček, 'Parallel Exclusion: Is It Time For A Theory Of Shared Monopoly?', 2013, available at http://www.mcmillan.ca/Files/159026_October%2018%20FINAL%20ABA%20Monopoly%20Matters%20-%20Fall%202013.pdf, 21-22, p. 21 and S. Hemphill and T. Wu, above note 29, pp. 1222-1223.

immediately noticeable and therefore detectable, whilst punishment is reinforced by the reason that permitting entry is permanent and thus severe as it eliminates the cheater's ability to revert to the exclusionary scheme after a temporary period of defection⁵⁸. Also, since parallel exclusion is associated with the erection of entry barriers that would be directed towards outsiders, it would exclude by definition competition from external destabilising factors such as actual or potential competitors, save in circumstances where the existing competitor or new entrant is a powerful firm⁵⁹. Hence, a situation of parallel exclusion is feasible to result from a horizontal concentration and accordingly it is imperative for such conduct to form a central part of the analysis of potential merger effects, especially in view of the fact that it can cause adverse impact on innovation, whilst its establishment could be straightforward and would not impose an unbearable burden on the Commission.

A rather exceptional situation of exclusion occurred in the case of *Irish Sugar* where the Commission and the GC found Article 102 to be infringed by abuses of a collective dominant position held by firms in a vertical relationship. In particular, the Commission and the GC adopted a peculiar definition of the relevant market that comprised both the production and distribution segments of the relevant industry and established a 'vertical' collective dominant position by relying on several connecting factors in the form of economic links which generated a 'parallelism of interest' and showed that the vertical competitors had the power to adopt a common market policy⁶⁰. Furthermore, the GC expressly stated that the mere fact that companies were in vertical relationship did not affect the finding of a collective

⁵⁸ S. Hemphill and T. Wu, above note 29, pp. 1220 and 1223.

⁵⁹ S. Hemphill and T. Wu, above note 29, p. 1225.

⁶⁰ *Irish Sugar v. Commission* (Case T-228/97 [1999], ECR II-02969 [1999]) paras 50-52 and 59.

dominant position⁶¹. Such a finding was also unaffected by the fact that the collective position was held jointly by a non-dominant distributor along with the dominant producer. Also, the GC highlighted that in a situation of vertical collective dominance, not only the collective, but also the individual conduct of the oligopolists can be deemed abusive, despite the fact that it is not the joint action of all the undertakings in question, if such behaviour forms a manifestation of the collective dominant position and relates to the exploitation of such a position⁶². Thus, parallelism in a vertical relationship does not require the establishment of a complete convergence of behaviour, but it is compatible with a certain degree of conduct differentiation, provided that such conduct is directed towards the achievement of the common objective, i.e. the exclusion of rivals. The principles derived from the *Irish Sugar* case can affect the assessment of horizontal mergers for the likelihood to create or enhance a situation of parallel exclusion between vertically related firms, i.e. the merged entity and a downstream or upstream rival. In such a situation the Commission would seek to demonstrate a collective interest to exclude through reliance on the vertical competitors' relationship, i.e. the presence of economic links or possibly illustrate an 'interdependence of interests', that would generate a commonality of incentives to adopt an exclusionary strategy and also prove that the merger would confer upon them the ability to effectively enforce exclusionary schemes by collective and/or individual actions, provided that in the latter case such schemes would serve the joint objective. Nevertheless, it is notable that such a scenario is more likely to be established in the assessment of the strengthening of collective dominance where evidence could be readily available in the pre-merger market, while on the contrary the rather exceptional circumstances under which such a situation may

⁶¹ *Irish Sugar* para. 63.

⁶² *Irish Sugar* para. 66 and Discussion Paper para. 74.

arise would render its demonstration most difficult in an assessment focusing on the creation of collective dominance.

(C) ARTICLE 101 CONCERTED PRACTICES v. MERGER REGULATION COLLECTIVE DOMINANCE

(1) Concerted Practices: Concept And Requirements

Article 101(1) applies to formal agreements and to concerted practices⁶³. The concept of concerted practices refers to ‘a form of coordination between undertakings which, without having been taken to the stage where an agreement properly so-called had been concluded, knowingly substitutes practical cooperation between them for the risks of competition’⁶⁴. Thus, concerted practices concern parallel behaviour based on collaboration, which has been implemented between undertakings without resorting to binding agreements, and it aims to prevent, restrict or distort competition. Moreover, for a concerted practice to arise there must be a consensus between the parties to cooperate rather than compete and even though a

⁶³ T. Hays, Anticompetitive Agreements And Extra-Market Parallel Importation, E.L.Rev., 2001, 26(5), 468-488, p. 476 and F. Alesse, Legislative Comment - The Economic Theory Of Non-Collusive Oligopoly And The Concept Of Concerted Practices Under Article 81, E.C.L.R., 1999, 20(7), 379-383, p. 379.

⁶⁴ *Coöperatieve Vereniging v. Commission (Suiker Unie)* (Cases C-40-48, 50, 54-56, 111, 113 and 114/73 [1975], ECR 1663 [1975], 1 CMLR 295 [1976]) para. 26, *Ahlstrom Oy v. Commission (Woodpulp)* (Cases C-89, 104, 114, 116, 117 and 125-29/85 [1993], ECR I-1307 [1993], 4 CMLR 407 [1993]) para. 63, *Zuchner v. Bayerische Vereinsbank* (Case C-172/80 [1981], ECR 2021 [1981], 1 CMLR 313 [1982]) para. 12 and *Imperial Chemical Industries v. Commission (Dyestuffs)* (Cases C-48, 49 and 51-57/69 [1972], ECR 619 [1972], CMLR 557 [1972]) para. 64. See also, O. Black, Concerted Practices, Joint Action And Reliance, E.C.L.R., 2003, 24(5), 219-228, p. 222 and T. Soames, above note 22, p. 25.

common behavioural plan need not be drawn, it is required that such cooperation influences each economic operator's ability to decide independently its market policy⁶⁵.

(I) Contact

The aim of Article 101(1) is to prevent collusive practices, the policy being that economic operators should determine independently their market behaviour⁶⁶. This requirement of independence precludes any direct or indirect contact between rivals in the form of communications, price announcements and exchange of sensitive information or of assurances, whereby the competitors disclose to each other an intended course of conduct with the object or effect of influencing their market behaviour⁶⁷. Hence, where contact

⁶⁵ *Suiker Unie* para. 173. See also, O. Black, above note 64, p. 222, B. Rodger, above note 2, p. 21 and R. Petriccione and V. Leone, Recent Developments Concerning Exchange Of Information, *E.L.Rev.*, 1988, 13(3), 196-201, p. 197.

⁶⁶ *Woodpulp* para. 63, *T-Mobile v. Raad Van Vestuur Van De Nederlandse Mededingingsautoriteit (Mobile Operators)* (Case C-8/08 [2009], ECR I-4529 [2009]) para. 32, *Zuchner* para. 13, *Commission v. Anic* (Case C-49/92P [1999], ECR I-4125 [1999]) para. 116 and *Suiker Unie* para. 173. See also, F. Torre, Evidence, Proof And Judicial Review In Cartel Cases, *World Competition*, 2009, 32(4), 505-578, p. 509 and No Cited Author, Case Comment - *Woodpulp*, *E.L.Rev.*, 1993, Supplement, 12-22, pp. 14-15.

⁶⁷ *Suiker Unie* para. 174, *Huls AG v. Commission* (Case C-199/92P [1999], ECR I-4287 [1999], 5 CMLR 1016 [1999]) para. 160, *Enichem Anic v. Commission* (Case T-6/89 [1991], ECR II-1623 [1991]) para. 200 and *SA Hercules Chemicals v. Commission* (Case T-7/89 [1991], ECR II-1711 [1991], 4 CMLR 84 [1992]) para. 258. See also, A. Jones, Case Comment - *Woodpulp*: Concerted Practice And/Or Conscious Parallelism?, *E.C.L.R.*, 1993, 14(6), 273-279, p. 275, Ş. Ardiyok, above note 13, p. 20, No Cited Author, Case Comment - Horizontal Agreements: Judgments Of The Court Of First Instance And The Court Of Justice, *E.L.Rev.*, 1991, Supplement, 4-9, p. 6, G. Gerven and E. Varona, The *Wood Pulp* Case And The Future Of Concerted Practices, *C.M.L.R.*, 1994, 31, 575-608, p. 591, No Cited Author, Case Comment - Cartels, *E.L.Rev.*, 1990, Supplement, 2-6, pp. 4-5, F. Alese, above note 63, p. 381, J. Lang, above note 12, p. 274, M. Franzosi, Oligopoly And The Prisoner's Dilemma: Concerted Practices And 'As If' Behaviour, *E.C.L.R.*, 1988, 9(4), 385-389, p. 388, C. Osti, Case

between rivals has occurred and it is of such a nature as to influence their competitive conduct by eliminating uncertainty as to their future market behaviour, a concerted practice will be found, i.e. such contact converts a mere parallel behaviour into a concerted practice⁶⁸. It is not necessary for the contact to result in a full understanding between competitors, since that would be an agreement⁶⁹. Nonetheless, it is imperative that such contact must concern the future intended competitive behaviour of the rivals and consequently it must occur prior to any conduct on the market⁷⁰.

(II) Parallel Behaviour

The Article 101 precedent reveals that it is almost impossible for a concerted practice to be inferred from evidence focusing solely on parallel behaviour. Specifically, in *Imperial Chemical Industries v. Commission (Dyestuffs)* the Court stated that a concerted practice should not be interpreted so broadly as to include only parallel behaviour and in *Coöperatieve Vereniging v. Commission (Suiker Unie)* the Court held that purely parallel conduct would not be caught under Article 101(1)⁷¹. Also, according to the AG's Opinion in *Ahlstrom Oy v. Commission (Woodpulp)*, parallel behaviour can at most constitute circumstantial evidence of a concerted practice, where such conduct leads to conditions of competition which do not

Comment - Information Exchanges In The Obscure Light Of *Woodpulp*, E.C.L.R., 1994, 15(3), 176-182, p. 178 and O. Black, above note 64, p. 221.

⁶⁸ *Dyestuffs* para. 118, *Enichem Anic v. Commission* paras 200-201 and *SA Hercules Chemicals v. Commission* paras 259-260. See also, I. Lianos, Collusion In Vertical Relations Under Article 81 EC, C.M.L.R., 2008, 45, 1027-1077, p. 1052, C. Osti, above note 67, pp. 178-180, F. Alese, above note 63, p. 382 and No Cited Author, above note 66, p. 21.

⁶⁹ No Cited Author, above note 66, p. 21.

⁷⁰ G. Gerven and E. Varona, above note 67, p. 600.

⁷¹ *Dyestuffs* para. 66 and *Suiker Unie* para. 174. See also, F. Alese, above note 63, p. 380.

correspond to the normal conditions of the market⁷². Moreover, the ECJ in *Woodpulp* stated that a concerted practice can be inferred from parallelism if it is the ‘only plausible explanation’ for such conduct, while there is no concerted practice if another economic rational explanation for the observed parallel behaviour exists⁷³. Accordingly, a conclusion of concerted practices might be inferred from an economic analysis of the parallel behaviour in question, where the prevailing market conditions are such that price parallelism without colluding is inherently unlikely⁷⁴. However, a finding of concerted practices based on such circumstantial evidence alone will be rebutted if there is another explanation for the parallelism of behaviour⁷⁵. In particular, parallel behaviour does not constitute an infringement of Article 101(1) if it results from the normal operation of the market and is arrived at merely through the oligopolists’ recognition of their interdependence and their consequent adaptation to the competitors’ conduct, because it constitutes ‘another plausible

⁷² *Woodpulp* Opinion (Opinion Of Advocate General Darmon, *Ahlstrom Osakeyhtio v. Commission (Woodpulp)* [1992], ECR I-1307 [1993]) para. 191. See also, I. Rubli, Case Comment - The Advocate-General's Opinion In *Wood Pulp*: Another Setback For The Commission's Competition Policy, E.C.L.R., 1993, 14(1), 26-28, p. 27.

⁷³ *Woodpulp* para. 71. See also, B. Rodger, The Oligopoly Problem And The Concept Of Collective Dominance: EC Developments In The Light Of U.S. Trends In Antitrust Law And Policy, C.J.E.L., 1995/1996, 2, 25-47, pp. 38-39, S. Stroux, above note 4, pp. 3-4, Ş. Ardiyok, above note 13, p. 20, B. Hawk and G. Motta, above note 4, p. 70, G. Gerven and E. Varona, above note 67, p. 587, No Cited Author, above note 66, p. 15, L. McGregor, The Future For The Control Of Oligopolies Following *Compagnie Maritime Belge*, E.C.L.R., 2001, 22(10), 434-442, pp. 434-435, A. Jones, above note 67, p. 275 and R. Nazzini, The Wood Began To Move: An Essay On Consumer Welfare, Evidence And Burden Of Proof In Article 82 Cases, E.L.Rev., 2006, 31(4), 518-539, p. 527.

⁷⁴ G. Gerven and E. Varona, above note 67, p. 602 and S. Stroux, above note 4, p. 15.

⁷⁵ *Woodpulp* para. 126. See also, B. Rodger, above note 73, p. 38 and A. Jones, above note 67, pp. 276-277.

explanation', i.e. intelligent alignment is a legitimate explanation of parallel behaviour which escapes condemnation under Article 101(1)⁷⁶.

(2) Tacit Collusion

The concepts of concerted practices under Article 101 and collective dominance under the Merger Regulation regulate different types of collusion. Therefore, while the concept of collective dominance under the Merger Regulation is centred on the control of tacit collusion, the concept of concerted practices focuses on the control of explicit collusion that is formed through contact between rivals and subsequent market conduct⁷⁷. On the contrary, the concept of concerted practices is not receptive to the control of tacit collusion and this position is interlinked to the evidentiary requirements set out by the Courts in order to demonstrate such an infringement. Specifically, in *Suiker Unie* and *Dyestuffs* the Courts expressly held that proof of parallel behaviour alone is insufficient to establish concertation, while in *Woodpulp* the Court referred to an unrealistic situation where the Commission could infer the existence of concertation by relying on circumstantial evidence deduced from parallel behaviour which demonstrate that tacit collusion constitutes the only plausible explanation for such conduct⁷⁸. However, the Commission's reliance on economic evidence derived solely from parallelism would leave room for an alternative competitive explanation in the specific context of oligopolies where interdependence forms part of the normal

⁷⁶ *Woodpulp* para. 71, *Suiker Unie* para. 174 and *Zuchner* para. 14. See also, J. Lang, above note 12, p. 275, Ş. Ardiyok, above note 13, p. 20, V. Korah, *Gencor v. Commission: Collective Dominance*, E.C.L.R., 1999, 20(6), 337-341, p. 339, A. Jones, above note 67, p. 276, M. Jephcott and C. Withers, above note 1, pp. 299-300, T. Vecchi, above note 3, p. 388, G. Gerven and E. Varona, above note 67, pp. 587 and 592 and B. Hawk and G. Motta, above note 4, p. 69.

⁷⁷ Ş. Ardiyok, above note 13, p. 18.

⁷⁸ E. Fournier, above note 33, p. 197, Ş. Ardiyok, above note 13, pp. 20-21 and T. Soames, above note 22, p. 25.

operation of such markets and would in most cases (or in all cases if we consider the lack of precedent tackling tacit collusion in oligopolies under Article 101(1)) lead to a finding of mere parallel behaviour⁷⁹.

This strict stance on the proof of tacit collusion in the context of Article 101 is also interlinked with and reflects the substantially higher evidentiary threshold that must be met in the ex-post appraisal of Article 101(1) infringements, as compared to the standard of proof employed in mergers. Specifically, the Courts' judgments have expressly declared the applicability of a standard of proof equivalent to the 'beyond reasonable doubt' threshold in Article 101 cases, as they have refrained to conclude that the Commission has established the existence of an infringement if they retained any reasonable doubt⁸⁰. Also, the Courts have stated that in case of doubt, the benefit of that doubt must be given to the defendant undertakings and this principle derives from the quasi-criminal nature of fines in cartel cases that gives rise to a presumption of innocence and suggests that any reasonable doubt must be overcome before an infringement is established⁸¹. Such a high threshold of proof is clearly imitated in the formulation of the 'only plausible explanation' test which essentially requires the Commission to produce an undisputable economic analysis which unequivocally demonstrates that tacit collusion led to concertation at a high degree of certainty, as such

⁷⁹ M. Melicias, above note 35, p. 485.

⁸⁰ *JFE Engineering v. Commission* (Case T-67/00 [2004], ECR II-02501 [2004]) para. 177 and *Dresdner Bank v. Commission* (Case T-44/02 [2006], ECR II-03567 [2006]) paras 60 and 144. See also, M. Melicias, above note 35, p. 484.

⁸¹ *Huls* para. 150, *Dresdner Bank* para. 61 and *P. Montecatini v. Commission* (Case C-235/92 [1999], ECR I-4575 [1999]) para. 176. See also, D. Bailey, above note 32, pp. 866-867, D. Wood, The Standard And Burden Of Proof In Article 82 Cases, C.L.I., 2008, March, 4-6, p. 4 and M. Melicias, above note 35, pp. 483, 488 and 508.

evidence must be capable to prevail over any reasonable doubt including any plausible alternative explanation for the observed behaviour⁸². The difficulty to prove tacit collusion under Article 101 is also reflected by the fact that even though in principle the Courts have pronounced the exercise of limited review to the Commission's complex economic evaluations and theoretically take into consideration its margin of appreciation, in practice the status quo is quite different⁸³. In particular, the fact that 'any' alternative plausible explanation would raise a doubt that would be resolved in favour of the defendant undertakings and would set aside the Commission's analysis suggests the absence of a margin of discretion, whilst this is also evident by the *Woodpulp* case where the ECJ took an interventionist position in reviewing the economic evidence and reasoning submitted by the Commission as it rejected the Commission's views, hired its own experts and relied on their reports⁸⁴.

Lastly, it should be noted that even though the formulation of the *Woodpulp* and *Impala* tests is to some extent overlapping, their actual application would be divergent. In particular, the formulation of the tests in *Woodpulp* and *Impala* presents some general common elements, since they are both based on a positive condition centred on the presence of parallel behaviour, a negative condition that in principle focuses on the absence of an alternative plausible explanation than anticompetitive conduct, but in essence it entails an important qualitative difference, and they are at least theoretically capable to establish previous tacit collusive behaviour. Nonetheless, this overlap is purely semantic as a careful

⁸² E. Fournier, above note 33, p. 198 and M. Melicias, above note 35, pp. 483, 485 and 486.

⁸³ *Aalborg Portland v. Commission* (Case C-204/00 [2004], ECR I-00123 [2004]) para. 279 and *Dresdner Bank* paras 66-67.

⁸⁴ D. Geradin and N. Petit, above note 35, p. 25.

analysis reveals that the Court's intent in drafting the *Woodpulp* test was negative towards the use of circumstantial evidence related to parallel conduct as proof of concertation, since in essence it excluded such evidence and left only an exceptional possibility where tacit collusion forms the only plausible explanation for the parallel behaviour in question. Conversely, the language of the GC in *Impala* is broader and positively points towards a finding of collective dominance, even in the absence of direct evidence of transparency, thereby attempting to include within its ambit of enforcement situations of tacit collusion where no sufficient direct evidence would be available and possibly other types of 'grey area' cases⁸⁵. Moreover, the underlying threshold of proof also points towards their distinctive applicability, as the *Woodpulp* test must be read in light of and reflects the Article 101 rigorous standard of proof which requires the establishment at a high degree of certainty that tacit collusion is the 'only plausible' explanation, whilst 'any' alternative plausible explanation will raise a doubt that would automatically rebut the Commission's analysis. On the contrary, the *Impala* test must be interpreted in light of the ECJ's requirement of 'plausibility' in *Sony* that reveals the applicability of a degree of flexibility in the establishment of its third condition and implies that in case the defendants present 'another' plausible explanation, which contradicts the Commission's analysis and its positive exclusion of such an explanation, the Court would have to make a decision on the merits. Both of these elements reveal the substantive distinctiveness between those tests and illustrate that the ineffectiveness of the *Woodpulp* test to control situations of tacit collusion under Article 101 does not affect the applicability of the *Impala* test in the context of mergers.

(D) CONCLUSION

⁸⁵ Note also the discussion on the application of the *Impala* test in 'grey area' cases at Ch. 2.

The concepts of collective dominance under the Merger Regulation, collective dominance under Article 102 and concerted practices under Article 101 are characterised by a lack of uniformity on the treatment of tacit collusion.

The concept of collective dominance under Article 102 revolves around the fulfilment of the criteria of a collective position, a collective dominant position and the abuse of such a position. The establishment of a collective position requires the presence of a connecting factor between independent undertakings which must lead the firms to present themselves or act as a collective entity on the market. The criterion of dominance focuses on whether the undertakings collectively hold significant market power and this is determined by assessing the structural characteristics of the relevant market. Lastly, the analysis of abuse emphasises on the anticompetitive behaviour of the undertakings holding a collective dominant position. The Article 102 collective dominance precedent illustrates an exclusive focus on explicit collusion, whilst the Guidance Paper reveals that the abuse of collective dominance and therefore tacit collusion cases are not within its enforcement priorities. Accordingly, even though post-*Piau* collective dominance in mergers and its corresponding theory under Article 102 are conceptually convergent on tacit collusion, their enforcement against such conduct is divergent as the Commission and the Courts have never addressed situations of tacit collusion under the later theory. This lack of enforcement is principally related to the higher evidentiary threshold that would be applicable in tacit collusion cases under Article 102 and derives from the ex-post nature of investigations as well as the quasi-criminal nature of infringements, but principally by the increased stringency in the application of the *Airtours* test in an ex-post context of assessment. However, the potential application of the *Impala* test could introduce a degree of flexibility in the demonstration of tacit collusion through the indirect fulfilment of the *Airtours* criteria, whilst it is also capable to simultaneously establish

the abuse element. Furthermore, the GC's lack of implementation of an effects-based approach in Article 102 cases creates problems in the application of the *Airtours* framework of analysis in this context, but the ECJ's recent inclination towards such an approach could also revive the prospect of enforcement against tacit collusion. Additionally, the Commission would be reluctant to challenge tacit collusion cases under Article 102 due to difficulties related to the formulation of an appropriate and effective remedy and in that regard it is suggested that the Commission could show greater willingness to accept structural commitments in the specific context of tacit collusion due to the inextricable link of such conduct to the relevant market structure. These fundamental problematic features of collective dominance under Article 102 reveal that, despite its own complexities, the concept of collective dominance in mergers is currently the preferable framework for the control of tacit collusion. Conversely, in the enforcement of collective dominance under the Merger Regulation the Commission has not attributed any emphasis on exclusionary practices. Nevertheless, the Commission should embrace considerations focusing on parallel exclusion as a horizontal concentration is capable to strengthen the ability or increase the likelihood of the remaining firms to engage in such conduct, whilst the principles derived from the *Irish Sugar* case can facilitate the establishment of post-merger parallel exclusion between vertically related firms.

In contrast to the concept of collective dominance under the Merger Regulation, the concept of concerted practices under Article 101 is not receptive to control situations of tacit collusion, as it requires the demonstration of contact between competitors and subsequent market conduct in order to establish an infringement, whereas parallelism alone can lead to a finding of concertation in circumstances where the Commission could prove that tacit collusion constitutes the single plausible explanation for the parallel conduct in question.

However, this is unrealistic in view of the fact that oligopolistic interdependence forms part of the normal operation of such markets and would constitute ‘another plausible explanation’ that would lead to a finding of mere parallel behaviour. The difficulty to establish tacit collusion is interlinked to the application of a standard of proof equivalent to the beyond reasonable doubt in Article 101 cases which is reflected in the formulation of the ‘only plausible explanation’ test and essentially requires the Commission to bring forward an economic analysis that would be capable to overcome any reasonable doubt. Lastly, the overlap in the formulation of the *Woodpulp* and *Impala* tests should be considered as merely semantic and does not have any limiting effect on the application of the *Impala* test in mergers.

CHAPTER 7

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THE COMPARATIVE ANGLE II: THE RELATIONSHIP BETWEEN COORDINATED AND UNILATERAL EFFECTS

(A) INTRODUCTION

The substantive test of the Merger Regulation 139/2004, as explained in the Horizontal Merger Guidelines, introduced the assessment of unilateral effects in EU Merger Control and confirmed that coordinated effects form an integral part of merger analysis in the EU¹.

Accordingly, the current framework of EU Merger Control demonstrates that horizontal concentrations may give rise to two types of anticompetitive concerns. On the one hand, anticompetitive effects may arise in oligopolies where after the completion of the concentration the remaining market participants would not compete with each other, but instead they would resort to tacit collusion. The effects of such mergers are termed coordinated effects and refer to circumstances where a concentration causes changes in the market characteristics that affect the future behaviour of the firms, which would either reinforce a pre-existing situation of tacit collusion or increase the likelihood of such conduct between rivals that would collectively reduce the effectiveness of competition in the relevant market and raise their prices post-merger. On the other hand, under certain market

¹ Note also the discussion on the analysis of unilateral and coordinated effects under the Merger Regulation 139/2004 at Ch. 5.

circumstances there can be a discretionary margin on the merged entity to individually raise its prices post-merger, particularly in situations where very few firms would be left in the industry, but none of them would have enough market power to be considered dominant and it is unlikely that the remaining firms would collude, in which case anticompetitive effects may arise from the fact that the merged entity would have increased market power combined with the lack of effective competitive constraints. The effects of such mergers are termed unilateral effects and they would result in price increases imposed by the merged entity, regardless of the response of the other competitors.

This Chapter examines the relationship between coordinated and unilateral effects in horizontal mergers. Section B illustrates the distinctive economic principles which underline each theory of harm. Section C focuses on the dissimilar set of necessary conditions that are relevant in the assessment of coordinated as opposed to unilateral effects. Section D emphasises on the divergent applicability of market definition and econometrics in each type of anticompetitive effects. Lastly, Section E concludes by outlining the relationship between these theories of harm.

(B) ECONOMIC THEORY

(1) Unilateral Effects And Single Firm Dominance v. Coordinated Effects And Collective Dominance

An important difference revolves around the fact that, while the concept of collective dominance matches closely and reflects the coordinated effects theory of harm, the concept of single firm dominance does not correspond entirely to the theory of unilateral effects². In particular, single firm dominance and unilateral effects are distinctive concepts as they are

² Note also the discussion on the relationship between collective dominance and coordinated effects at Ch. 2.

based on different economic theories, i.e. the concept of single firm dominance is based on the monopoly model whilst the theory of unilateral effects has its foundation on the oligopoly model³. Thus, in order to establish single firm dominance the merged firm must be dominant with very high market shares approaching those of a monopolist. Conversely, unilateral effects concern circumstances where the merged entity, while not being individually dominant post-merger, has the ability to increase its prices or reduce its output because of the elimination of important competitive constraints. Also, under the theory of unilateral effects the merged entity does not need to be the leading player in terms of market shares held in the relevant market post-merger, but it suffices if it is the second largest player in the market, i.e. unilateral effects apply below the market share level which is necessary for the establishment of single firm dominance⁴. Therefore, the establishment of single firm dominance entails stricter requirements than those which are sufficient for the demonstration of unilateral effects and to that extent the introduction of the later theory of harm in the examination of concentrations under the Merger Regulation 139/2004 substantive test relaxed the threshold of intervention in situations where competition concerns revolve around the likelihood that the merged entity would afford the ability to individually exercise market power post-merger⁵.

³ S. Baxter and F. Dethmers, *Unilateral Effects Under The European Merger Regulation: How Big Is The Gap?*, E.C.L.R., 2005, 26(7), 380-389, pp. 380-381.

⁴ A. Christiansen, *The Reform Of EU Merger Control – Fundamental Reversal Or Mere Refinement?*, 2006, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=898845, 1-60, p. 23, S. Volcker, *Mind The Gap: Unilateral Effects Analysis Arrives In EC Merger Control*, E.C.L.R., 2004, 25(7), 395-409, p. 396, A. Weitbrecht, *EU Merger Control In 2005 – An Overview*, E.C.L.R., 2006, 27(2), 43-50, p. 45 and S. Baxter and F. Dethmers, above note 3, p. 384.

⁵ Note also the discussion on the lower intervention threshold applicable under the theory of unilateral effects at Ch. 5.

(2) Tacit Collusion And Recognition Of Interdependence v. Unilateral Action

The analysis of both unilateral and coordinated effects is based on the non-cooperative oligopoly model of economic theory. Moreover, in oligopolies the positions of the firms are interdependent due to the particular market structure, which means that each firm cannot act without taking into account the likely reactions of its competitors and such a factor is relevant not only in the analysis of coordinated effects, but also in the assessment of unilateral effects concerning homogeneous markets as well as where the rivals firms' products are close substitutes to the merged entity's products in differentiated markets⁶. Nevertheless, these similarities are of trivial importance in view of the fact that the substance of each anticompetitive theory is underlined by a set of significantly different economic principles. In particular, while coordinated effects are based on the recognition of oligopolistic interdependence and the adoption of tacit collusive behaviour which leads the market participants to act collectively, such requirements are not relevant in a unilateral effects merger examination, as in the latter situation the merged entity acts individually in its effort to raise its prices.

Specifically, the coordinated effects theory of harm refers to the situation where the oligopolists recognize their interdependence, align their conduct in the market and cease to compete effectively by resorting to tacit collusive behaviour post-merger⁷. Thus, coordinated effects arise in oligopolies where after the completion of the concentration the remaining market participants would act collectively by adopting and sustaining a tacit collusive

⁶ M. Ivaldi, B. Jullien, P. Rey, P. Seabright and J. Tirole, *The Economics Of Unilateral Effects*, Interim Report For DG Competition, 2003, available at http://idei.fr/doc/wp/2003/economics_unilaterals.pdf, 1-105, p. 3.

⁷ *Gencor* paras 276-277, *Airtours* para. 60 and *Sony* para. 121.

strategy in order to maximise their joint profits⁸. Accordingly, such a theory of harm refers to the collective exercise of market power, as the merged entity cannot raise its prices individually, but there must be a switch in behaviour from competition to coordination for all the major market participants post-merger, i.e. the non-merging rivals must tacitly collude with the merged entity⁹. On the contrary, unilateral effects refer to situations where the competitive constraints on individual firms are weakened by the concentration, which removes the pre-merger competitive pressure exercised from a rival that is part of the merged entity post-merger. This can lead to increased market power for the merged entity, thereby widening the scope to profitably increase its prices or reduce its output. Thus, unilateral effects focus on the likelihood that the merging firm would exercise market power individually and in the absence of any coordinated response from the remaining rivals, which means that such a theory of harm is not based on the recognition of oligopolistic interdependence neither on a requirement of an aligned reaction by its competitors¹⁰. Hence, in the theory of unilateral effects there is no requirement for an alteration in the behaviour of the non-merging rivals post-merger in comparison to their pre-merger conduct, as the focus is

⁸ *Airtours* paras 61-62. See also, E. Kloosterhuis, Joint Dominance And The Interaction Between Firms, E.C.L.R., 2001, 22(3), 79-92, p. 81.

⁹ R. Willig, Merger Analysis, Industrial Organization Theory And Merger Guidelines, In: *Microeconomics: Brookings Papers*, 1991, p. 292, B. Dubow, D. Elliott and E. Morrison, Unilateral Effects And Merger Simulation Models, E.C.L.R., 2004, 25(2), 114-117, p. 115, H. Haupt, Collective Dominance Under Article 82 EC And EC Merger Control In The Light Of The *Airtours* Judgment, E.C.L.R., 2002, 23(9), 434-444, pp. 434-435, M. Ivaldi, B. Jullien, P. Rey, P. Seabright and J. Tirole, The Economics Of Horizontal Mergers: Unilateral And Coordinated Effects, 2003, available at http://www.een.sk/docs/KD7105150ENS_002.pdf, 1-163, p. 19 and L. White, Market Power: How Does It Arise? How Is It Measured?, 2012, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2056708, 1-50, p. 10.

¹⁰ A. Christiansen, above note 4, p. 23 and S. Voigt and A. Schmidt, The Commission's Guidelines On Horizontal Mergers: Improvement Or Deterioration?, C.M.L.R., 2004, 41, 1583-1594, p. 1585.

exclusively on the alteration of the merging firms' behaviour, and irrespective of the fact that the non-merging rivals may anticipate that the concentration would lead to higher prices set by the merged entity and individually increase their prices as well¹¹. Accordingly, the unilateral effects theory of harm focuses on strategies that the merged entity can implement independently of its competitors and evaluates its ability to raise its prices exclusively through its individual decisions, without implementing a tacit collusive strategy together with the remaining market players post-merger¹².

Lastly, since the unilateral effects theory of harm results from the situation of non-collusive oligopolies, the firms are best responding in every period to prices that are expected to be set by their rivals and each competitor tries to maximize its own short run profits post-merger¹³. Conversely, when firms tacitly coordinate they adopt a parallel conduct in order not to maximize their short run profits, but to raise their prices above their short run best responses¹⁴. Hence, while in both theories of harm the analysis focuses on the feasibility of price increases post-merger, the actual level at which prices may rise differs in each circumstance.

¹¹ Horizontal Merger Guidelines para. 24. See also, A. Christiansen, above note 4, p. 23, J. Baker, Market Concentration In The Antitrust Analysis Of Horizontal Mergers, 2010, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1092248, 1-27, p. 17, K. Kuhn, Closing Pandora's Box? Joint Dominance After The *Airtours* Judgment, 2002, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=349521, 1-20, p. 4 and M. Ivaldi et al., above note 6, pp. 38-39.

¹² S. Volcker, above note 4, p. 396, K. Fountoukakos and S. Ryan, A New Substantive Test For EU Merger Control, E.C.L.R., 2005, 26(5), 277-296, p. 282 and I. Kokkoris, Do Merger Simulation And Critical Loss Analysis Differ Under The SLC And Dominance Test?, E.C.L.R., 2006, 27(5), 249-260, p. 251.

¹³ K. Kuhn, above note 11, p. 5.

¹⁴ K. Kuhn, above note 11, p. 5.

(3) The Mechanism Of Harm

A fundamental difference between unilateral and coordinated effects revolves around the issue that while the mechanism of harm in unilateral effects cases is clear cut, i.e. if the facts in a merger examination support a unilateral effects theory of harm it is obvious as a matter of economic logic why such a concentration would lead to higher prices, the mechanism of harm by which a merger would increase the likelihood of coordination is complex¹⁵.

The analysis of the unilateral effects theory of harm focuses on the pre-merger price which each merging firm charged for a product and the constraint imposed upon it by the presence of competition from its rivals' products, including those of its future merged partner. Such a constraint is removed by the concentration which brings together the former rivals and gives to the merged entity an incentive to raise its prices unilaterally post-merger. By contrast, the economic mechanism by which a merger enables or makes it easier for the remaining market players to implicitly coordinate their actions is dubious and consequently it is particularly complex to predict the future effects of a concentration¹⁶. As a direct result of such complexity, in coordinated effects there are no clear market share thresholds nor econometric methods which can assist the Commission and the Courts to reach a conclusion. In such circumstances, the idea that coordination is more likely constitutes only an empirical observation about probabilities, but it cannot explain why any particular merger is harmful or definitely distinguish those concentrations that would make coordination more likely from

¹⁵ J. Baker, Why Did The Antitrust Agencies Embrace Unilateral Effects?, *George Mason Law Review*, 2003-2004, 12, 31-37, pp. 35-36.

¹⁶ Note also the discussion on the oligopoly problem at Ch. 3.

those that would not. Therefore, the mechanism of harm is straightforward in unilateral effects, while it is complex and difficult to be established in coordinated effects. Such divergence and the incumbent complexities of collusion theory adversely affect the Commission's ability to demonstrate coordinated effects, whilst the straightforward nature of the unilateral effects theory of harm renders it more suitable for application and enforcement.

(C) THE NECESSARY CONDITIONS

The conditions which are necessary to be established in the assessment of coordinated as opposed to unilateral effects are largely distinctive and such divergence derives directly from the diverse economic principles that underline each theory of harm. Thus, while in the assessment of coordinated effects the emphasis is on the establishment of the *Airtours* factors, the Commission focuses on the fulfilment of a set of differentiated conditions in the analysis of unilateral effects.

(1) Coordinated Effects

In the analysis of coordinated effects the Commission carries out its assessment by evaluating the cumulative fulfilment of the *Airtours* factors, i.e. the establishment of a common policy, monitoring, retaliation and absence of external countervailing reactions, in order to reach a finding on whether the market participants would have the ability and the incentive to adopt a common collusive policy and to sustain such an outcome after the completion of the concentration¹⁷.

(2) Unilateral Effects

¹⁷ Note also the discussion on the *Airtours* criteria at Ch. 2.

The unilateral effects theory of harm illustrates the conditions which must be assessed in order to determine whether the merged entity would have the individual ability as well as the incentive to profitably increase its prices at an anticompetitive level post-merger and these conditions revolve around two parameters. On the one hand, the incentive of the merged entity to raise its prices after the completion of the concentration is related to the proportion of lost sales that each merging firm would be expected to recapture in increased sales of the other merging firm's product. On the other hand, a unilateral price increase also depends on how much of a competitive constraint the remaining rivals would impose on the merged entity after the completion of the concentration¹⁸. Consequently, in the analysis of unilateral effects the Commission focuses on the degree of substitution between the merging firms' products pre-merger, the degree of differentiation between the merged entity's products and its competitors' products post-merger and the ability of competitors to reposition their products or the possibility of new entry in the market post-merger¹⁹.

(I) Substitutability Of The Merging Firms' Products

A key question in a unilateral effects merger appraisal concerns the closeness of competition between the merging firms, which is defined by assessing the degree of substitutability between their products before the completion of the concentration²⁰. The

¹⁸ M. Pflanz, *Oracle/PeopleSoft: The Economics Of EC Review*, E.C.L.R., 2005, 26(3), 123-127, p. 125, S. Voigt and A. Schmidt, above note 10, p. 1587 and K. Kuhn, above note 11, p. 3.

¹⁹ S. Volcker, above note 4, p. 402 and F. Alese, *Foreclosing The Gap: The Commission's Non-Horizontal Merger Guidelines – A 'Response' To Simon Bishop*, E.C.L.R., 2008, 29(3), 196-200, p. 198.

²⁰ Horizontal Merger Guidelines para. 28. On the one hand, in *SCA/Metsä Tissue* (Case COMP/M.2097 [2001], OJ L57/1 [2002]), *Volvo/Scania* (Case IV/M.1672 [2000], OJ L143/74 [2001]), *Siemens/Drägerwerk/JV* (Case COMP/M.2861 [2003], OJ L291/1 [2003]), *Barilla/BPS/Kamps* (Case COMP/M.2817 [2002]), *DuPont/ICI* (Case IV/M.214 [1992], OJ L7/13 [1993]), *GE/Instrumentarium* (Case COMP/M.3083 [2003], OJ L109/1

extent of product substitutability between the merging firms pre-merger determines the likelihood of price increases by the merged entity post-merger²¹. In particular, when the merging firms produce highly substitute goods, it will be rational for them to raise their prices post-merger, because they will recapture some of the customers who would have switched away from one product in favour of the previously competing product pre-merger and this factor removes a constraint on pricing and may lead to higher prices²². Thus, the more closely the merging firms compete pre-merger, i.e. offer products which are close substitutes, the more likely it is that the concentration will appreciably reduce competition post-merger²³. Therefore, the elimination of rivalry that results from the completion of a merger between firms which produce close substitutes may lead to increased market power and higher prices, particularly in cases where this rivalry has been in the past an important source of competition on the relevant market²⁴.

[2004]) and *KNP/Bühmann-Tetterode/VRG* (Case COMP/M.291 [1993], OJ L217/35 [1993]) the Commission intervened on the basis of unilateral effects, because the concentrations would eliminate the closest substitutes which were the basic alternatives from the point of view of the customers and formed the only competitive constraint on the merging firms pre-merger. On the other hand, in *Adidas/Reebok* (Case COMP/M.3942 [2006]), *Korsnas/AD Cartonboard*, *Amer/Salomon* (Case COMP/M.3765 [2005]), *Volvo/Renault* (Case IV/M.1980 [2000]) and *Philips/Agilent Health Care Solutions* (Case COMP/M.2256 [2001]) the Commission held that the merging firms' products were not particularly close substitutes and therefore the concentrations would not lead to unilateral effects. See also, K. Kuhn, above note 11, p. 3, M. Pflanz, above note 18, p. 125 and O. Budzinski and A. Christiansen, *The Oracle/PeopleSoft Case: Unilateral Effects, Simulation Models And Econometrics In Contemporary Merger Control*, 2007, available at http://www.uni-marburg.de/fb02/makro/forschung/gelbereihe/artikel/2007-02_budzinski-christiansen.pdf, 1-34, p. 3.

²¹ M. Ivaldi et al., above note 6, p. 36.

²² J. Baker, above note 11, pp. 19-20.

²³ S. Baxter and F. Dethmers, above note 3, p. 387 and M. Pflanz, above note 18, p. 125.

²⁴ Horizontal Merger Guidelines paras 25 and 28.

The consumers play an important role in the analysis of the degree of substitutability between the merging firms' products²⁵. Specifically, the closeness of substitution is determined by assessing the proportion of customers that would rank the merging firms' products as their first and second choices and would be less likely to switch to the products of the remaining market players in response to a price increase imposed by the merged entity on one of its two brands²⁶. Therefore, the higher the ratio of buyers which view the merging firms' products as highly interchangeable the greater the price rise is likely to be, because in such circumstances the merged entity would have a greater incentive to impose a price increase post-merger and such an increase would be more profitable.

(II) Product Differentiation Between The Merged Entity And Its Competitors

A decisive factor in a unilateral effects analysis revolves around the degree of product differentiation between the products supplied by the merged entity as compared to those supplied by its rivals and such a factor also determines the extent to which the merged entity may increase its prices post-merger²⁷. As a general rule, unilateral effects are more likely to

²⁵ C. Shapiro, *Mergers With Differentiated Products*, Antitrust, 1996, Spring, 23-29, p. 23.

²⁶ Horizontal Merger Guidelines para. 28. See also, S. Volcker, above note 4, p. 396.

²⁷ Horizontal Merger Guidelines para. 28. For example, in *Oracle/PeopleSoft* (Case COMP/M.3216 [2004], OJ L218/6 [2005]) the Commission held that an important element in the assessment of unilateral effects was the extent to which the merged entity would be constrained by the non-merging rivals post-merger. See also, O. Budzinski and A. Christiansen, *Simulating The Unilateral Effects Of Mergers: Implications Of The Oracle/Peoplesoft Case*, 2006, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=924375, 1-34, p. 3, M. Ivaldi et al., above note 6, pp. 36-37 and R. Starek and S. Stockum, *What Makes Mergers Anticompetitive?: 'Unilateral Effects' Analysis Under The 1992 Merger Guidelines*, Antitrust L.J., 1994-1995, 63, 801-821, p. 805.

occur in differentiated product markets, because in such markets an increase in the price charged for the relevant product is more feasible and profitable²⁸. Specifically, in a homogeneous market the merged firms' ability to increase their prices post-merger would be limited due to the high degree of substitution between the merged entity's products and the products supplied by its non-merging rivals, while on the contrary the greater the degree of product differentiation between the merged undertaking and its competitors the greater the ability to unilaterally raise prices²⁹. The amount of market power enjoyed by a merged entity due to its differentiated products again depends on the degree to which the customers consider its products to be preferable to the products of its competitors³⁰.

(III) Repositioning And New Entry

An important factor in the assessment of unilateral effects concerns the ability of the non-merging rivals to replace lost competition post-merger, in which case the Commission's analysis focuses on the likelihood of product repositioning by actual competitors or the feasibility of new entry by potential competitors³¹. Accordingly, the Commission examines whether the possibility of repositioning or new entry may influence the merged entity's incentive to raise its prices and whether the merged entity is able to hinder such repositioning or new entry³². In particular, the possibility of product repositioning may render a price

²⁸ C. Shapiro, above note 25, p. 23, A. Christiansen, above note 4, p. 23, J. Baker, above note 11, p. 17 and G. Werden and L. Froeb, *The Effects Of Mergers In Differentiated Products Industries: Logit Demand And Merger Policy*, J.L.Econ.&Org., 1994, 10(2), 407-426, p. 407.

²⁹ R. Starek and S. Stockum, above note 27, p. 803 and C. Shapiro, above note 25, p. 23.

³⁰ R. Starek and S. Stockum, above note 27, p. 806, B. Dubow et al., above note 9, p. 115 and S. Volcker, above note 4, p. 396.

³¹ S. Volcker, above note 4, p. 397.

³² Horizontal Merger Guidelines para. 30.

increase imposed by the merged entity unprofitable, while a decreased likelihood of repositioning increases the merged entity's incentive to raise its prices. An analysis of the rivals' cost of repositioning their products and an assessment of the buyers' preferences must be carried out in the appraisal of such a condition³³.

The criterion of product repositioning or new entry reflects the condition focusing on the external countervailing reactions in the analysis of coordinated effects, as both criteria emphasise on the foreseeable reaction of outsiders post-merger. Accordingly, in the analysis of both theories of harm the Commission examines the factors of barriers to entry, maverick firms and countervailing buyer power³⁴. Barriers to entry form an important aspect of the unilateral effects analysis, as in the absence of high entry barriers the ability of the merging firms to increase their prices would be significantly constrained by a new entrant that may come into the market and set lower prices for a closely substitutable product³⁵. Also, in the assessment of unilateral effects the existence of a maverick firm constitutes a crucial consideration, since such a firm may attempt to reposition its products in case a price increase occurs. Lastly, the assessment of countervailing buyer power is relevant in the analysis of

³³ R. Starek and S. Stockum, above note 27, pp. 819-820.

³⁴ Note also the discussion on barriers to entry, maverick firms and countervailing buyer power in the context of coordinated effects at Ch. 3. See also, M. Ivaldi et al., above note 6, p. 4.

³⁵ In *EDP/ENI/GDP* (Case COMP/M.3440 [2004], OJ L302/69 [2005]) it was held that the concentration would strengthen EDP's dominant position in the electricity wholesale and retail markets, as it would remove GDP as a potential entrant to such markets. Conversely, in *Korsnas/AD Cartonboard* the Commission held that competition from outside the EEA would act as a constraint on the merged entity's behaviour. Also, in *Adidas/Reebok* the fact that barriers to entry in the industry were low led the Commission to clear the merger.

unilateral effects, since the presence of a strong buyer may render unprofitable the merged entity's price increase by switching to other suppliers³⁶.

(D) MARKET DEFINITION AND ECONOMETRICS

The coordinated and unilateral effects theories of harm are divergent on the exercise of market definition, as even though it forms an integral part of the examination of mergers for coordinated effects, in the assessment of unilateral effects cases the link between market delineation and competitive effects is much less direct. Also, econometric methods of analysis have been developed and are fully applicable in the examination of unilateral effects thereby facilitating the assessment of such a theory of harm, whereas these analytical tools are of limited, if any, assistance in the examination of coordinated effects.

(1) Market Definition

The Horizontal Merger Guidelines and the practice of the Commission illustrate that market definition forms an integral part of any merger analysis³⁷. Accordingly, the first step in the assessment of mergers for coordinated effects in homogeneous product industries is consisted by the definition of the relevant market, which assists the Commission to identify a set of firms that may raise anticompetitive concerns, but also to measure market shares or concentration levels so as to make inferences about the likely effects of the concentration on the relevant market under investigation³⁸. Conversely, the exercise of market definition is less

³⁶ For example, in *Korsnas/AD Cartonboard* the Commission held that the buyers' bargaining strength would eliminate unilateral effects concerns.

³⁷ Horizontal Merger Guidelines para. 10. See also, A. Christiansen, above note 4, p. 7.

³⁸ No Cited Author, *Analysing Differentiated Product Mergers: The Relevance Of Structural Analysis*, Harvard Law Review, 1997-1998, 111, 2420-2437, p. 2420, C. Shapiro, above note 25, p. 23 and J. Baker and C.

attractive in the assessment of concentrations for unilateral effects in differentiated product markets, since there is a widespread preference among economists and competition authorities to consider directly the extent of competition between the merging firms and the degree to which the rivals' products are close substitutes to the merged entity's products through the use of econometric techniques that can produce reliable as well as accurate predictions of the effects of the merger and do not depend on market delineation³⁹. The validity of such practice is reinforced by the fact that market definition in differentiated markets is a difficult exercise, since products that are close substitutes for the merging firms' products are included within the relevant market, while distant substitutes are excluded, and this approach may lead to ambiguous results, as heterogeneous markets are characterised by a large variety of goods with varying degrees of distinction⁴⁰. Also, the exercise of market delineation in order to measure market shares and concentration indices is less important in the assessment of unilateral effects in differentiated markets, as these thresholds are a poor

Shapiro, Reinventing Horizontal Merger Enforcement, 2007, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=991588, 1-44, p. 37.

³⁹ For example, the 2010 US Horizontal Merger Guidelines analysis of differentiated markets identifies econometric methods that are designed to predict unilateral price effects, i.e. the UPP, GUPPI and IPR, and it is explicitly stated that such analytical tools 'need not rely on market definition' (Section 6.1 2010 US Horizontal Merger Guidelines). See also, S. Baxter and F. Dethmers, above note 3, p. 385, H. Wellford and G. Wells, The 'Litigation Mulligan' In The 2010 Merger Guidelines: Better Economics But Not (Necessarily) More Clarity Before The Agencies And The Courts, C.P.I., 2010, October, 1-11, p. 4, S. Volcker, above note 4, p. 396, C. James, Rediscovering Coordinated Effects, Paper Presented At The American Bar Association Annual Meeting, 2002, available at <http://www.usdoj.gov/atr/public/speeches/200124.pdf>, 1-12, p. 8 and O'Melveny and Myers LLP, U.S. Antitrust Agencies Issue Revised Horizontal Merger Guidelines, 2010, available at <http://omm.com/us-antitrust-agencies-issue-revised-horizontal-merger-guidelines-08-20-2010/>, 1-3, p. 1.

⁴⁰ R. Mills and R. Weinstein, Unilateral Effects Of Mergers: The Simulation Approach, 1999, available at http://www.micronomics.com/articles/Merger_Paper.pdf, 1-18, pp. 4-5.

indicator of competitive harm in such industries, i.e. they overstate potential adverse effects if the merging firms' products are relatively distant within the relevant market and understate such effects if their products are especially close within that market⁴¹.

Despite these views, the Commission's practice largely remains attached to the traditional approach of market definition in unilateral effects cases, whilst econometrics do not constitute a substitute, but a complement, to the market delineation exercise. However, the Horizontal Merger Guidelines leave open the possibility to examine a merger without the exercise of market delineation, because they state that the Commission's assessment 'normally', i.e. not always, entails the definition of the relevant market⁴². This position in conjunction with the constant developments in econometric analysis afford to the Commission the ability to gradually depart from the necessity to define the relevant market and move towards the direct assessment of unilateral effects in differentiated markets. Conversely, the assessment of coordinated effects is not capable to be carried out in the absence of market definition, as there are no applicable econometric methods that can directly assess the likelihood of collusion in homogeneous markets.

(2) Econometric Techniques

Econometric techniques have been integrated and play an important role in the assessment of unilateral effects in differentiated product markets, i.e. the principal scenario where such anticompetitive effects may arise. Therefore, the 'traditional' econometric

⁴¹ R. Mills and R. Weinstein, above note 40, p. 4, J. Baker, above note 11, p. 21, J. Baker and C. Shapiro, above note 38, pp. 33-34 and I. Kokkoris, *The Reform Of The European Control Merger Regulation In the Aftermath Of The Airtours Case – The Eagerly Expected Debate: SLC v. Dominance Test*, E.C.L.R., 2005, 26(1), 37-47, p. 43.

⁴² Horizontal Merger Guidelines para. 10.

techniques facilitate the unilateral effects analysis as they may predict the extent to which buyers consider the products in question to be close substitutes so as to ascertain the extent to which one firm's products constrain the pricing of rival products and determine whether a merger among rivals would lead to higher prices by removing those constraints⁴³. Also, the 'new' econometric techniques provide an important insight in the assessment of unilateral effects, since they offer a direct preliminary estimation of the merging firms' pricing incentives. On the contrary, in the examination of coordinated effects in homogeneous product markets, i.e. the predominant scenario where this theory of harm may arise, there is no corresponding set of econometric tools which may quantify the increased likelihood of collusion resulting from a merger and accordingly the Commission's difficulty to establish this theory of harm is also reflected by the limited assistance offered by these methods of analysis⁴⁴. Specifically, coordinated effects cannot simply be inferred from current data and accordingly, with one exception, there has never been applied any detailed econometric analysis in the assessment of such a theory of harm⁴⁵.

(I) Traditional Econometric Techniques

Merger Simulation

Merger simulation models afford the ability, by using industry data and based on demand estimates, to simulate the effects of a merger on prices and/or output as well as on consumer welfare and examine whether the exercise of unilateral market power would be

⁴³ J. Baker, above note 15, p. 34 and I. Kokkoris, above note 12, p. 249.

⁴⁴ C. Shapiro, above note 25, p. 24 and M. Ivaldi et al., above note 6, p. 26.

⁴⁵ In *Sony/BMG* the Commission undertook a price correlation analysis. See also, K. Kuhn, above note 11, p. 14.

feasible post-merger⁴⁶. Merger simulation models do not rely on market definition, but instead they directly analyse the closeness of the merging firms' products and the extent to which the availability of substitutes may constrain their ability to raise their prices unilaterally⁴⁷. The simulated prices are subsequently compared to the prices that would prevail in the market 'but for' the merger, in order to determine the impact of the concentration under investigation on the relevant market. Simulation models have played an important role in the Commission's decisions in unilateral effects and the assessment of such a theory of harm has been improved through the systematic use of these models, because their analysis is accurate, they identify asymmetric price effects and they provide a means for trading off possible merger efficiencies⁴⁸. However, merger simulation should be looked at with caution, since it has limitations in that it needs large amounts of data, it only looks at static competition, it requires a significant number of assumptions and it is highly sensitive to the chosen assumptions⁴⁹.

In the analysis of coordinated effects in differentiated products markets, Davis has presented a merger simulation model and set out a methodology that focused on the returns achieved by each market participant in three scenarios, i.e. 'collusion', 'Nash equilibrium' and 'defection', in order to determine whether the rivals would have the incentive to tacitly

⁴⁶ *Oracle/PeopleSoft* paras 191-196. See also, R. Mills and R. Weinstein, above note 40, p. 6 and I. Kokkoris, above note 12, p. 251.

⁴⁷ R. Mills and R. Weinstein, above note 40, p. 6.

⁴⁸ In *Volvo/Scania*, *Philip Morris/Papastratos* (Case COMP/M.3191 [2003]), *Oracle/PeopleSoft* and *Lagardere/Natexis/VUP* (Case COMP/M.2978 [2004], OJ L125/54 [2004]) merger simulation models were used in order to quantify the price effects of the concentration. See also, I. Kokkoris, above note 12, p. 254.

⁴⁹ B. Dubow et al., above note 9, p. 117.

collude in prices post-merger⁵⁰. Conversely, economists have not developed an adequate model for the evaluation of coordinated effects in homogeneous markets, whilst the prospective development of simulation models in such a context seems difficult to materialise, and this forms a gap in the Commission's ability to assess such a theory of harm.

Elasticities Of Demand

In the assessment of unilateral effects the merged entity's ability to exercise market power and raise its prices individually depends on the elasticities of demand that it faces, whilst the employment of econometric methods is particularly useful in such a context. Specifically, the use of econometric techniques focusing on the own-price elasticities of demand and the cross-price elasticities of demand facilitate the measurement of both the degree of substitutability between the merging firms' products pre-merger as well as the degree of substitutability between the merged entity's products and the products of its competitors post-merger. On the one hand, the own-price elasticity of demand reflects the responsiveness on the quantity of a product required by consumers as related to changes in its price, i.e. where the price of a product is increased such econometric method describes the extent to which the sales volume of that product falls⁵¹. Accordingly, the ability of the merged entity to raise its prices post-merger partly depends on the own-price elasticity of demand for its products. On the other hand, the cross-price elasticity of demand reflects the degree to which customers substitute across products and how strongly the demand for a product changes in response to alterations in the price of another product, assuming that all

⁵⁰ P. Davis, Coordinated Effects Merger Simulation With Linear Demands, 2006, available at http://www.biicl.org/files/2757_peter_davis_-_coordinated_effects_merger_simulation_with_linear_demands.pdf, 1-22, pp. 1, 3 and 11.

⁵¹ R. Mills and R. Weinstein, above note 40, p. 8.

other conditions remain constant⁵². Therefore, high cross elasticities between the merging firms' products generate higher prices, whereas high cross elasticities between the merged entity's products and those of its rivals lead to lower prices⁵³. The diversion ratio is a proxy used for measuring cross-price elasticities of demand, as it provides the proportion of sales lost by the price rise of one product that is captured by a competing product and it can be computed through the consumers' first and second choices⁵⁴.

Elasticities of demand also form part of the analysis of coordinated effects⁵⁵. However, the Commission does not systematically use econometric methods to measure demand elasticities in the examination of coordinated effects and in addition, even though demand is a relevant factor in the assessment of such a theory of harm, it plays a non-determinative and therefore less important role to the overall analysis in relation to the assessment of unilateral effects.

Critical Loss Analysis

The critical loss analysis estimates how much the hypothetical monopolist's sales would have to fall in order to make a price increase unprofitable⁵⁶. This econometric model is applicable in the assessment of unilateral effects. Specifically, in the analysis of such a theory of harm, if the evidence on the likely loss of sales associated with a price increase suggest that the actual loss is greater than the critical loss, unilateral price effects are not of any

⁵² R. Mills and R. Weinstein, above note 40, p. 8.

⁵³ M. Ivaldi et al., above note 6, p. 38.

⁵⁴ A. Christiansen, above note 4, p. 23 and M. Ivaldi et al., above note 6, p. 81.

⁵⁵ Note also the discussion on the assessment of demand elasticities at Ch. 3.

⁵⁶ I. Kokkoris, Critical Loss Analysis: Critically Ill, E.C.L.R., 2005, 26(9), 518-525, p. 519.

concern⁵⁷. Conversely, if the reduction in sales is less than the critical loss, a price rise would increase the profits of the hypothetical monopolist and unilateral effects are a possible anticompetitive outcome of the merger.

The critical loss analysis may also be used in the assessment of coordinated effects, because a firm's incentive to cheat is significantly influenced by the level of its individual critical loss⁵⁸. In particular, the incentive to cheat is measured by the level of sales a cheating firm can afford to lose by the retaliatory action of the colluding group before deviation becomes unprofitable. Accordingly, if a firm expects that cheating would increase its sales at a higher level than its critical loss, it would deviate from the collusive policy⁵⁹. Nevertheless, despite its usefulness, the critical loss analysis has not been systematically applied in practice by the Commission in the assessment of coordinated effects.

(II) New Econometric Techniques

UPP, GUPPI And IPR

The new econometric techniques for the assessment of unilateral effects in differentiated product markets are comprised by the UPP (upwards pricing pressure), the GUPPI (gross upwards pricing pressure index) and the IPR (indicative price rise). These 'pricing pressure indexes' have been embraced by the Commission and constitute sophisticated tools for merger screening that indicate whether an in-depth examination of a

⁵⁷ I. Kokkoris, above note 12, p. 255.

⁵⁸ In *VNU/WPP/JV* (Case COMP/M.3512 [2004]), *Alcoa/British Aluminium* (Case COMP/M.2111 [2000]) and *Pirelli/BICC* (Case COMP/M.1882 [2000], OJ L070/35 [2003]) the Commission used critical loss analysis so as to assess the incentive to collude and it relied on the outcome of such econometric models in order to conclude that there would be no scope for collective dominance.

⁵⁹ Note also the discussion on the critical discount factor which determines the possibility of deviation at Ch. 2.

concentration under examination would be required⁶⁰. Such indexes evaluate directly the merging firms' incentives to raise their prices post-merger, whilst some of them offer an estimation on the scale of price increases, by combining the measurement of the merging firms' closeness of competition assessed through the diversion ratio between their products with a measure of profitability that is assessed through the gross price margin, i.e. the difference between prices and marginal costs.

The UPP compares the loss of direct competition between the merging parties which creates UPP in relation to merger-related efficiencies which create DPP (downwards pricing pressure) and a merger is flagged for further scrutiny if the net effect of the two forces creates UPP⁶¹. Specifically, a merger creates net UPP on Product 1 if the diversion ratio from Product 1 to Product 2 multiplied by the gross profit margin of Product 2 is larger than the merger-induced marginal cost savings for Product 1⁶². The UPP test does not estimate the

⁶⁰ The Commission used the GUPPI in *Hutchison 3G Austria/Orange Austria* (Case COMP/M.6497 [2012]), whilst in *Unilever/Sara Lee* (Case COMP/M.5658 [2010]) UPP indices were calculated.

⁶¹ J. Farrell and C. Shapiro, *Antitrust Evaluation Of Horizontal Mergers: An Economic Alternative To Market Definition*, The B.E. Journal Of Theoretical Economics, 2010, available at <http://faculty.haas.berkeley.edu/shapiro/alternative.pdf>, 1-39, pp. 2 and 9, S. Moresi and S. Salop, *Incentive Scoring In Merger Review*, 2013, available at <https://www.aeaweb.org/aea/2014conference/program/retrieve.php?pdfid=990>, 1-32, pp. 6-7 and S. Moresi, *The Use Of Upward Price Pressure Indices In Merger Analysis*, 2010, available at <http://www.crai.com/uploadedFiles/Publications/the-use-of-UPPIs-in-merger-analysis.pdf>, 1-12, pp. 2-3.

⁶² $UPP1 = D12 (P2 - C2) - E1C1$, where D12 is the pre-merger diversion ratio from Product 1 to Product 2, P2 - C2 represents the margin between the price and the marginal cost of product B and E1C1 is the merger-induced marginal cost efficiency for product A. See also, A. Swan and R. Murgatroyd, *Developments In Unilateral Effects Analysis: Price Pressure Tests*, available at <http://www.compcom.co.za/assets/Uploads/events/Fifth-Annual-Conference/Murgatroyd-Swan-Developments-in-Unilateral-Effects-Analysis-Final.pdf>, 1-13, p. 4, Lear

percentage magnitude of the price increase, as it is only informative on the likelihood of a post-merger price rise, and it should be performed for both merging firms' products in order to evaluate the merged entity's incentive to raise its prices⁶³. The GUPPI is a modified version of the UPP, but measures only the upward pricing component, i.e. it does not take into account efficiencies. This sole focus on the upward pricing pressure means that any merger between firms selling substitute products would result in a GUPPI greater than zero and accordingly it has to be interpreted against a threshold of 5% or 10%, above which the concentration would raise competition concerns⁶⁴. It follows that the GUPPI does not merely offer an indication of the merging firms' incentives to raise their prices, but it also facilitates the estimation of the scale of potential price effects⁶⁵. The GUPPI for Product 1 is given by the diversion ratio from Product 1 to Product 2, multiplied by the gross profit margin of Product 2 and divided by the ratio of Product 1's price⁶⁶. Again there will be two GUPPI

Competition Note, Merger Screen And The Use Of Price Pressure Tests, 2013, available at http://www.learlab.com/pdf/lcn_merger_screen_price_pressure_test_1360694100.pdf, 1-10, p. 3 and D. Hildebrand, CCR, UPP, GUPPI And IPR – Merger Screening Tools, 2013, available at http://www.ee-mc.com/uploads/media/CCR_Spring_20130306.pdf, 1-6, p. 3.

⁶³ D. Hildebrand, above note 62, p. 3, Oxera Economics Council, Unilateral Effects Analysis And Market Definition: Substitutes In Merger Cases?, 2011, available at http://www.oxera.com/Oxera/media/Oxera/downloads/Agenda/Unilateral-versus-market-definition_1.pdf?ext=.pdf, 1-4, p. 2 and A. Swan and R. Murgatroyd, above note 62, p. 5.

⁶⁴ S. Moresi and S. Salop, above note 61, pp. 10 and 26 and C. Shapiro, Update From The Antitrust Division, 2010, available at <http://www.justice.gov/atr/public/speeches/264295.pdf>, 1-34, p. 24.

⁶⁵ A. Oldale and J. Padilla, Economist's Note EU Merger Assessment Of Upward Pricing Pressure: Making Sense Of UPP, GUPPI, And The Like, *Journal Of European Competition Law And Practice*, 2013, 4(4), 375-381, p. 379.

⁶⁶ $GUPPI1 = D12 (P2 - C2) / P1$ where D12 is the diversion ratio from firm A to firm B, P1 and P2 are firm A and firm B's prices respectively, C2 represents firm B's marginal costs, with all values evaluated at their pre-

measures for a merger involving firms' A and B respective Products 1 and 2 and they should be both assessed in order to evaluate potential anticompetitive concerns. The IPR measures directly the magnitude of price increase that will arise from the merger and accordingly it must be assessed against a certain price increase threshold, for example a 5% threshold⁶⁷. Even though the IPR test essentially uses the same information as the UPP and the GUPPI, i.e. diversion ratios and margins, it is distinctive in that it combines the incentives of the merging parties to set the prices of both products, it requires detailed information or assumptions on the demand function, i.e. linear or isoelastic demand, and assumes that the merging firms are symmetric, i.e. they have identical margins, prices and diversion ratios⁶⁸.

Effects And Criticism

The introduction and use of pricing pressure indexes in the assessment of unilateral effects in differentiated markets brings about two principal benefits. On the one hand, such econometric techniques facilitate the Commission to accurately identify critical mergers at the screening stage, since they serve as a simple and straightforward 'diagnostic tool' that addresses the prospect of likely anticompetitive effects by indicating whether the merging

merger levels. See also, A. Swan and R. Murgatroyd, above note 62, p. 5 and 3, S. Moresi and S. Salop, above note 61, p. 8.

⁶⁷ Lear Competition Note, above note 62, pp. 4-5.

⁶⁸ The IPR tests for symmetric firms with linear or isoelastic demand are given by $IPR_{linear} = M * D / 2 * (1 - D)$ and $IPR_{isoelastic} = M * D / (1 - M - D)$ where m is the pre-merger symmetric margin of Firms 1 and Firm 2 and d is the pre-merger diversion ratio from product A to product B which is assumed to be equal to the level of pre-merger diversion from product B to product A. See also, D. Hildebrand, above note 62, p. 5, Lear Competition Note, above note 62, pp. 4-5, A. Swan and R. Murgatroyd, above note 62, pp. 6-7, Oxera Economics Council, above note 63, p. 3.

firms would have an incentive to increase their prices post-merger⁶⁹. In that regard, such indexes are advantageous because they do not require market definition and are not burdensome in the sense that they do not demand voluminous data in order to be applied, whilst such data would normally be readily available⁷⁰. On the other hand, these indexes provide some initial *prima facie* quantitative evidence on the merging firms' pricing incentives and to that extent, the availability of such evidence offers some assistance to the Commission's effort to establish unilateral effects⁷¹. Nevertheless, caution is needed as the evidential value of these quantitative tools must not be overstated. In particular, these indexes do not reflect the results of a complete merger analysis, because they do not consider factors that may prevent the occurrence of price rises post-merger such as potential supply-side responses, i.e. entry or repositioning, or responses by customers, i.e. countervailing buyer power⁷². Thus, the Commission must not heavily rely on the evidential value of pricing pressure indices, since they do not constitute dispositive evidence and need to be complemented with further qualitative or quantitative analysis⁷³.

Also, despite their largely beneficial effects, there is an inherent lacuna in the pricing pressure indexes that is related to their sole focus on the scenario of unilateral effects in differentiated markets where the firms compete in prices and their inability to constitute a sufficient screen to assess the risks of tacit collusion or unilateral effects in homogeneous

⁶⁹ D. Hildebrand, above note 62, p. 1.

⁷⁰ D. Hildebrand, above note 62, p. 3.

⁷¹ S. Moresi, above note 61, p. 7 and Lear Competition Note, above note 62, p. 3.

⁷² A. Oldale and J. Padilla, above note 65, p. 376, Lear Competition Note, above note 62, pp. 3 and 9 and A. Swan and R. Murgatroyd, above note 62, p. 3.

⁷³ S. Moresi, above note 61, p. 2, Oxera Economics Council, above note 63, p. 2, Lear Competition Note, above note 62, p. 9 and A. Swan and R. Murgatroyd, above note 62, p. 12.

markets as well as anticompetitive effects where the rivals compete in other competitive variables such as innovation⁷⁴. To that extent, the price pressure indexes and the advantages they contain essentially direct the analysis towards the specific scenario of unilateral effects in differentiated product markets, despite the fact that this is merely one of the situations encountered in the assessment of concentrations. Nevertheless, caution is needed as the Commission must objectively use the appropriate theories of harm to challenge mergers, which means that the model of unilateral effects in differentiated product markets where the firms compete in prices must be truly appropriate for the merger under examination in order to make use of the pricing pressure indexes, because a resort to a ‘forced fit’ could entail the danger of misguided judgments, as for example the Commission may clear mergers assessed for unilateral effects that would not meet the pricing pressure indexes (or meet those indexes and fail on other grounds such as entry or repositioning) but could raise collusion problems.

In contrast to the improvements brought about in the assessment of unilateral effects in differentiated markets through the development of the price pressure indexes, there is lack of any equivalent advanced quantitative method to act as a screening tool and address the market participants’ collusive incentives in the predominant scenario for coordinated effects that concerns the situation of tacit collusion in homogeneous markets. On the one hand, even though some limited attempts have been made to develop quantitative techniques for determining the magnitude of coordinated effects and identify the firms’ collusive incentives, these are problematic to the extent that their focus is solely on differentiated markets. For

⁷⁴ G. Werden and L. Froeb, Choosing Among Tools For Assessing Unilateral Merger Effects, 2011, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1804243, 1-28, pp. 1 and 27, A. Oldale and J. Padilla, above note 65, p. 376 and W. Gayle, R. Marshall, L. Marx and J. Richard, Coordinated Effects In The 2010 Horizontal Merger Guidelines, 2010, available at <http://people.virginia.edu/~wg4b/MergerDraft7.pdf>, 1-20, pp. 2 and 6-8.

example, Kovacic et al. propose that the quantification of the incremental profits to firms from post-merger collusive conduct gives an indirect measure of the probability of collusion, based on the assumption that increased profitability intensifies the firms' collusive incentives, whilst calculations of the payoffs to deviate facilitate the assessment of the stability of collusion among various subsets of firms in order to identify which firms have the greatest incentive to coordinate on prices in differentiated markets⁷⁵. Also, Moresi et al. have developed the CPPI, which indicates the firms' incentives to collude through price leadership in differentiated markets, i.e. the US concept of 'parallel accommodating conduct'⁷⁶. Thus, none of these models can facilitate the assessment of the firms' incentive to adopt and sustain a tacit collusive strategy in homogeneous markets. On the other hand, two types of screening measures could be applied in order to address coordinated effects concerns in homogeneous markets, i.e. the HHI and the TCAI ('tacit collusion asymmetry index'). Nevertheless, both of these screening tools present individual problems, as the HHI fails to take into account asymmetries, whilst the TCAI forms an improved screening mechanism based on market shares that focuses on whether asymmetries enhance or offset merger effects but it has not gained any wide appraisal or application by the Commission⁷⁷. Also, both of these screening

⁷⁵ W. Kovacic, R. Marshall, L. Marx and S. Schulenberg, Coordinated Effects In Merger Review: Quantifying The Payoffs From Collusion, available at <https://faculty.fuqua.duke.edu/~marx/bio/papers/FordhamChapter%2013.pdf>, 271-285, pp. 271-273, 274-276, 278, 281 and 284 and W. Kovacic, R. Marshall, L. Marx and S. Schulenberg, Quantitative Analysis Of Coordinated Effects, 2009, available at <https://faculty.fuqua.duke.edu/~marx/bio/papers/KovacicMarshallMarxSchulenbergALJ2009.pdf>, 397-430, pp. 399, 402, 405 and 426.

⁷⁶ Note also the discussion on parallel accommodating conduct at Ch. 5.

⁷⁷ Note also the discussion on the HHI at Ch. 3. See also, D. Parker, A Screening Device For Tacit Collusion Concerns, E.C.L.R., 2006, 27(8), 424-433, pp. 426 and 433.

measures are inferior to the pricing pressure indexes as they require market definition and they are not capable to directly identify the firms' collusive incentives. Overall, the lack of quantitative tools equivalent to the pricing pressure indexes retains the absence of any reliable screening mechanism, it restricts the Commission's analytical tools to the employment of a strictly qualitative analysis in order to assess the firms' collusive incentives and accordingly it maintains the difficulty to identify as well as establish tacit collusion in homogeneous markets.

(E) CONCLUSION

Coordinated and unilateral effects are complementary theories of harm as they are characterised by substantial differences both in terms of substance as well as in relation to the tools available for their demonstration.

Coordinated and unilateral effects are founded on different economic principles. Thus, coordinated effects correspond to the concept of collective dominance, they are based on the market participants' recognition of oligopolistic interdependence and the adoption as well as the sustainability of a tacit collusive policy that leads to a collectively ability to exercise market power and raise their prices above their short-run best responses. Conversely, unilateral effects contain more flexible requirements than those which are necessary for the establishment of single firm dominance, they are centred on the individual ability of the merged entity to exercise market power due to the removal of an important competitive constraint and relate to the raise of short run profits. Also, an important distinction concerns the mechanism of harm which is straightforward in unilateral effects, whilst it is complex in coordinated effects and this factor is strongly linked to the difficulty to establish the later theory of harm.

Coordinated and unilateral effects are also largely divergent on the necessary conditions that must be established under each theory of harm. Therefore, the assessment of coordinated effects emphasises on the establishment of the *Airtours* criteria. Conversely, the examination of unilateral effects focuses on the closeness of competition between the merging firms' products pre-merger, the extent to which the merged entity's products are differentiated to the non-merging rivals' products post-merger and the feasibility of repositioning by actual competitors or new entry by potential competitors.

Lastly, these theories of harm are distinctive on the issue of market definition and the applicability of econometric analysis. Specifically, the definition of the relevant market forms an integral part in the examination of mergers for coordinated effects, whereas in the assessment of unilateral effects in differentiated product markets the direct analysis of the closeness of substitution by the use of econometric techniques can replace market delineation. Also, econometric methods of analysis have been fully developed and are applied regularly in the examination of unilateral effects, which means that the establishment of such a theory of harm has been assisted by the employment of simulation models, own-price and cross-price elasticities of demand as well as critical loss analysis. Conversely, such analytical methods are of no or only limited assistance in the examination of coordinated effects in homogeneous markets. Moreover, the development and application of pricing pressure indexes, i.e. the UPP, GUPPI and IPR, facilitates the assessment of unilateral effects in differentiated markets, as they constitute an initial screening mechanism to identify problematic concentrations and provide some *prima facie* quantitative evidence of the merging firm's incentives to raise their prices post-merger. Conversely, the lack of any corresponding set of tools that would act as a screening mechanism and identify collusive

incentives in the scenario of tacit collusion in homogeneous markets maintains the difficulty to establish coordinated effects.

CHAPTER 8

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STANDARD OF PROOF

PROOF IN COLLECTIVE DOMINANCE MERGER CASES

(A) INTRODUCTION

The framework of proof in collective dominance merger cases revolves around the burden of proof, the standard of proof and judicial review. The burden of proof determines who has to discharge the evidentiary threshold in a given case¹. The standard of proof relates to the actual evidentiary threshold that has to be met before a decision can be reached on whether a concentration is compatible or incompatible with the Common Market². Lastly, judicial review refers to the review of the Commission's decisions by the Courts for potential errors.

¹ D. Demougine and C. Fluet, *Deterrence v. Judicial Error: A Comparative View Of Standards Of Proof*, 2004, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=585770, 1-14, p. 9 and D. Bailey, *Standard Of Proof In EC Merger Proceedings: A Common Law Perspective*, C.M.L.R., 2003, 40, 845-888, p. 849.

² Y. Botteman, *Mergers, Standard Of Proof And Expert Economic Evidence*, J.C.L.&E., 2006, 2(1), 71-100, p. 74, B. Vesterdorf, *Standard Of Proof In Merger Cases: Reflections In The Light Of Recent Case Law Of The Community Courts*, E.C.J., 2005, 1(1), 3-33, p. 6, F. Polverino, *Assessment Of Coordinated Effects In Merger Control - Between Presumption And Analysis*, 2006, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=901688, 1-41, pp. 24-25 and L. Prete and A. Nucara, *Standard Of Proof And Scope Of Judicial Review In EC Merger Cases: Everything Clear After Tetra Laval?*, E.C.L.R., 2005, 26(12), 692-704, p. 693.

These components of proof are not separate one to another, but on the contrary there is a close link and a certain degree of overlap between them. In particular, the standard of proof is interrelated to the burden of proof, since the standard of proof affects the ability of the Commission to discharge its burden of proof, while together those concepts determine whether the infringements alleged are held to be proved as a matter of law³. Also, the standard of proof is closely related to the degree of judicial review, because the intensity of judicial review fluctuates and depends on the underlying standard of proof⁴.

This Chapter analyses the issue of proof in collective dominance merger cases. Section B presents the requirements that the Commission must prove in order to prohibit a concentration on the basis of collective dominance. Section C focuses on the allocation of the burden proof between the Commission and the merging firms throughout the various stages of the assessment of concentrations. Section D examines the standard of proof and in that context it analyses the ‘requisite legal standard’, it ascertains the level of likelihood at which the Commission must establish its case, it emphasises on the ‘convincing evidence’ requirement, while it also highlights the introduction of a symmetrical standard of proof in clearance and prohibition decisions. Section E centres on judicial review, since it scrutinises the ‘manifest error of assessment’ standard of review, it examines the margin of discretion conferred on the Commission in undertaking complex economic assessments as well as the extent to which such discretion has been reduced by the Courts’ decisions in *Airtours* and *Impala* and it also highlights the Commission’s duty to state adequate and detailed reasons. Lastly, Section F offers a conclusion on this subject.

³ D. Bailey, above note 1, p. 849.

⁴ B. Vesterdorf, above note 2, pp. 31-32, D. Bailey, above note 1, p. 850 and Y. Botteman, above note 2, p. 77.

(B) THE REQUIREMENTS OF PROOF

In the appraisal of collective dominance merger cases the Commission's focus is on the establishment of the necessary conditions for coordination and the fulfilment of the Merger Regulation 139/2004 substantive test. Specifically, the Commission examines whether the concentration under investigation would significantly impede effective competition either by increasing the likelihood of tacit collusion after its completion or by reinforcing an existing situation of tacit collusion post-merger.

(1) The Substantive Standard

The Commission must satisfy the substantive test for the appraisal of concentrations in order to prohibit a merger. In that regard, the substantive test contained in the Merger Regulation 139/2004 altered the requirements for demonstrating the incompatibility of a concentration with the Common Market. Specifically, the 'significant impediment to effective competition' has become the only necessary requirement for proving incompatibility, whilst the establishment of 'dominance' is no longer a prerequisite to blocking a merger, even though it is still the prime example of a significant impediment to effective competition⁵. Therefore, the Commission may prove the incompatibility of a

⁵ Note also the discussion on the form of the substantive test under the Merger Regulation 139/2004 at Ch. 5. See also, K. Fountoukakos and S. Ryan, A New Substantive Test For EU Merger Control, E.C.L.R., 2005, 26(5), 277-296, p. 288, S. Hornsby, Can Enhanced Merger Control Solve The Oligopoly Problem?, C.L.I., 2004, February, 17-20, p. 17, A. Weitbrecht, EU Merger Control In 2005 - An Overview, E.C.L.R., 2006, 27(2), 43-50, p. 44, S. Zhu, Converge? Diverge? A Comparison Of Horizontal Merger Laws In The United States And European Union, World Competition, 2006, 29(4), 635-651, p. 637, F. Enrique and G. Diaz, The Reform Of European Merger Control: Quid Novi Sub Sole?, World Competition, 2004, 27(2), 177-199, p. 188 and R. Thompson, Goodbye To 'The Dominance Test'? Substantive Appraisal Under The New UK And EC Merger Regimes, Comp. Law., 2003, 332-346, p. 339.

concentration either ‘directly’, i.e. by establishing the sole element of a significant impediment to effective competition, or ‘indirectly’, i.e. by establishing the creation or the strengthening of a dominant position that would significantly impede effective competition⁶.

(2) Tacit Collusion

In *Airtours* the GC prescribed the Commission’s evidentiary burden and made clear the elements which it needs to fulfil in order to demonstrate collective dominance in mergers⁷. In particular, the *Airtours* judgment asserted that the Commission must consider whether the materialization of the concentration would increase the likelihood of coordination post-merger and in order to reach a positive finding on collective dominance it must establish that the remaining firms would have the incentive as well as the ability to adopt a common policy of tacit collusion and to sustain such an understanding over time⁸.

According to the *Airtours* decision, tacit coordination would arise in oligopolistic markets when four cumulative and necessary conditions have been fulfilled. In particular, the Commission must firstly prove that the merger would lead the firms to adopt a tacit common understanding on a mutual acceptable profit maximising strategy of elevated prices and/or reduced output post-merger, i.e. that the undertakings involved in the concentration and one or more other undertakings would be able to adopt together the same course of conduct in the

⁶ Note also the discussion on the ‘direct’ and ‘indirect’ proof of incompatibility at Ch. 5.

⁷ A. Overd, After The *Airtours* Appeal, E.C.L.R., 2002, 23(8), 375-377, p. 375 and B. Rompuy and C. Pauwels, Is The Standard Of Proof Imposed By The Community Courts Undermining The Efficiency Of EC Merger Control? The *Sony/BMG* Joint Venture Case In Perspective, EUSA Tenth Biennial International Conference, 2007, available at <http://aei.pitt.edu/8013/1/rompuy-b-02g.pdf>, 1-33, p. 8.

⁸ *Airtours* paras 61-62. See also, S. Volcker, Mind The Gap: Unilateral Effects Analysis Arrives In EC Merger Control, E.C.L.R., 2004, 25(7), 395-409, p. 408 and F. Polverino, above note 2, pp. 22-23.

relevant market⁹. Secondly, the Commission must prove that the coordinating firms would be able to monitor each other and in that regard there must be sufficient transparency for each undertaking concerned to be aware, sufficiently precisely and quickly, of the way in which the market conduct of the other firms is evolving¹⁰. Thus, the Commission is not required to prove that the market would be transparent in all respects, i.e. perfect transparency is not necessary, but it must establish that the market would be sufficiently transparent on the key parameters of competition such as prices and quantities¹¹. The GC in *Impala* qualified this requirement in the assessment of the strengthening of collective dominance by stating that, even in the absence of direct evidence of market transparency, such a factor could be inferred indirectly provided that the three cumulative conditions of the indirect test have been fulfilled¹². Thirdly, a retaliation mechanism must be present in order to sustain the common policy over time and guarantee its enforcement¹³. The GC in *Airtours* and *Impala* specified the requirements of proof for the establishment of punishment mechanisms. Specifically, the GC in *Airtours* held that, in the assessment of the creation of collective dominance, the Commission does not need to prove the presence of a specific retaliation mechanism post-merger nor to describe in detail how the punishment mechanism would operate, but it must at least provide sufficient evidence that adequate deterrents would exist, which would be such

⁹ Note also the discussion on common policy at Ch. 2. See also, F. Polverino, above note 2, p. 7.

¹⁰ *Airtours* paras 62 and 156, *Impala* para. 247 and *Sony* para. 123.

¹¹ Note also the discussion on transparency at Ch. 2. See also, A. Scott, 'An Immovable Feast?': Tacit Collusion And Collective Dominance In Merger Control After *Airtours*, CCR Working Paper CCR 02-6, 2006, available at http://www.uea.ac.uk/polopoly_fs/1.104458!ccr02-6.pdf, 1-21, p. 17 and V. Rabassa and P. Christensen, The *Airtours* Decision: Is There A New Commission Approach To Collective Dominance?, E.C.L.R., 2001, 22(6), 227-237, p. 231.

¹² *Impala* paras 252-253.

¹³ *Airtours* para. 62, *Impala* para. 247 and *Sony* para. 123. Note also the discussion on retaliation at Ch. 2.

that it would not worth the while for any member of the dominant oligopoly to depart from the common course of conduct¹⁴. Moreover, the GC in *Impala* held that, in the analysis of the strengthening of collective dominance, the mere existence of punishment mechanisms in the form of a demonstrated possibility of deterrents is sufficient to establish the condition of retaliation, rather than evidence of their exercise by proving the actual punishment of deviators in the past, since if the members of the oligopoly conformed with the common policy, there was no need to resort to the exercise of a sanction¹⁵. Consequently, it is sufficient to establish the existence of a potential mechanism for deterrence and the Commission is not required to show instances of actual punishment of deviators in the past, because the most effective deterrent is that which has not been used¹⁶. Furthermore, the GC in *Impala* held that the Commission has to satisfy two cumulative elements in order to establish that the lack of punishment in the past leads to the conclusion that the condition relating to retaliation has not been satisfied, i.e. there must be proof of deviation from the common policy and

¹⁴ *Airtours* paras 62 and 195. See also, A. Scott, above note 10, p. 18, J. Langer, *The Airtours Judgment: A Welcome Lecture On Oligopolies, Economics And Joint Dominance*, C.J.E.L., 2003, 10, 105-117, p. 111, A. Nucara, *Schneider/Legrand And Tetra Laval/Sidel*, *Fast Track Towards Merger Reform?*, E.B.L.R., 2003, 14(2), 193-200, p. 195, A. Overd, above note 7, p. 376 and A. Nikpay and F. Houwen, *Case Comment - Tour De Force Or A Little Local Turbulence? A Heretical View On The Airtours Judgment*, E.C.L.R., 2003, 24(5), 193-202, pp. 198-199.

¹⁵ *Impala* para. 466. See also, B. Rompuy, *Case Comment - Implications For The Standard Of Proof In EC Merger Proceedings: Bertelsmann And Sony Corporation Of America v. Impala*, E.C.L.R., 2008, 29(10), 608-612, p. 610, S. Volcker and C. O'Daly, *Case Comment - The Court Of First Instance's Impala Judgment: A Judicial Counter-Reformation In EU Merger Control?*, E.C.L.R., 2006, 27(11), 589-596, p. 591 and K. Wright, *Case Comment - Perfect Symmetry? Impala v. Commission And Standard Of Proof In Mergers*, E.L.Rev., 2007, 32(3), 408-418, p. 413.

¹⁶ *Impala* para. 466. See also, S. Pilsbury, *The Impala Decision: An Economic Critique*, E.C.J., 2007, 3(1), 31-47, pp. 35 and 40.

then actual proof of the absence of retaliatory measures¹⁷. According to the fourth *Airtours* condition, the Commission must establish that the foreseeable reaction of current and future competitors, customers and consumers would not jeopardise the results expected from the common policy¹⁸. Therefore, the Commission must prove that the collusive group would be sufficiently insulated from external destabilising forces, i.e. there would be absence of countervailing competitive or buyer power, in order to establish this requirement.

The post-*Airtours* developments on the issue of proof were marked by the *Impala* judgment where the GC launched the indirect test which introduced a degree of flexibility in proving the strengthening of pre-existing collective dominance, as it held that in the assessment of an existing collective dominant position the *Airtours* criteria may be established indirectly¹⁹. Consequently, the Court relaxed the requirement of proof by reverting from the *Airtours* judgment which set out the cumulative conditions for coordination in a strict manner, since it asserted that in the appraisal of pre-existing collective dominance it is not necessary for the Commission to establish directly the presence of these conditions as it may fulfil each one or all of those criteria indirectly²⁰. Thus, the indirect test afforded an alternative and more flexible way to establish the *Airtours* criteria. Conversely, in *Sony* the ECJ imposed an additional requirement for the establishment of collective dominance in mergers, as it held that the Commission must firstly set up a hypothetical

¹⁷ *Impala* para. 469. See also, B. Rompuy and C. Pauwels, above note 7, p. 27 and I. Kokkoris, Assessment Of Mergers Inducing Coordinated Effects In The Presence Of Explicit Collusion, *World Competition*, 2008, 31(4), 499-522, p. 506.

¹⁸ *Airtours* para. 62, *Impala* para. 247 and *Sony* para. 123. Note also the discussion on the absence of external countervailing reactions at Ch. 2.

¹⁹ *Impala* paras 251-252. Note also the discussion on the *Impala* indirect test at Ch. 2.

²⁰ B. Rompuy and C. Pauwels, above note 7, pp. 25-26.

coordination mechanism suitable to the circumstances of the case and then assess the *Airtours* factors or apply the *Impala* indirect test on that basis²¹. Thus, the hypothetical functioning of the market must be demonstrated on a plausible basis, which raises the requirements of proof imposed on the Commission.

Lastly, it is notable that proving the creation of a collective dominant position is a more onerous task than proving the strengthening of such a position²². Specifically, in the analysis of the creation of collective dominance the Commission must prove that the alteration which the concentration brings about in the relevant market structure and the firms' collusive incentives is substantial, i.e. the nature of competition changes to such an extent so that the firms participating in a competitive market pre-merger would coordinate post-merger. Conversely, a lower degree of modification of the market characteristics and the competitors' behaviour suffices for the establishment of the strengthening of collective dominance, i.e. the concentration eliminates any remaining competitive constraints and leads the firms operating in a market characterised by a degree of coordination between them pre-merger to adopt a fully-fledged coordinated strategy post-merger.

(C) BURDEN OF PROOF

²¹ *Sony* paras 125, 126 and 129. Note also the discussion on the *Sony* requirement of a hypothetical mechanism of coordination at Ch. 2.

²² Note also the discussion on the creation or the strengthening of collective dominance at Ch. 2. See also, J. Lang, Oligopolies And Joint Dominance In Community Antitrust Law, In: *Annual Proceedings Of The Fordham Corporate Law Institute - International Antitrust Law And Policy 2001*, Edited By B. Hawk, 2002, 269-359, p. 338 and G. Robert and C. Hudson, Past Coordination And The Commission Notice On The Appraisal Of Horizontal Mergers Under The Council Regulation On The Control Of Concentrations Between Undertakings, E.C.L.R., 2004, 25(3), 163-168, p. 164.

The burden of proof revolves around the question of whether the Commission or the merging firms bear the onus of proof in each phase of the merger analysis. In particular, the anticompetitive assessment of a concentration scrutinized for collective dominance consists of three steps: the delineation of the relevant market, the determination of whether the proposed concentration would significantly impede effective competition by tacitly coordinating with the other market participants post-merger and the evaluation of any relevant defences in the situation where anticompetitive effects have been found likely to arise. The general principle underlying the burden of proof is that it should be allocated to the party which has greater access to information and available resources as regards the particular issue under investigation. Accordingly, the burden of proof is incumbent on the Commission to prove its case, except for the merger defences where the merging firms bear the onus to establish their arguments.

Specifically, as regards the issue of market delineation, the Notice On Market Definition implies that the Commission bears the burden to prove the relevant product and geographic markets²³. Therefore, the onus is incumbent on the Commission to gather all the necessary evidence in order to define the relevant market, whilst the merging firms contribute to this assessment by giving to the Commission any available information at their disposal but they do not bear any proportion of the burden of proof. Also, at the stage of the substantive assessment, the Commission bears the onus to prove that a concentration would significantly impede effective competition in the relevant market and this can be discerned

²³ Notice On Market Definition (Commission Notice On The Definition Of The Relevant Market For The Purposes Of Community Competition Law, [1997], OJ C372/5 [1998], 4 CMLR 177 [1998], available at [http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31997Y1209\(01\):EN:HTML](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31997Y1209(01):EN:HTML)) paras 25-31.

from the wording of Article 2(1) of the Merger Regulation 139/2004²⁴. This position is in accordance with the decisions in *France v. Commission*, *Price Waterhouse/Coopers & Lybrand* and *Airtours* where the Commission and the Courts agreed that the burden of proof falls on the Commission to prove a collective dominant position in mergers²⁵. Conversely, in the assessment of potential defences to an anticompetitive concentration, the Horizontal Merger Guidelines determine that the merging firms bear the burden to substantiate the claimed efficiencies or the failing firm defence²⁶. Thus, where the Commission proves that the merger would give rise to coordination after its completion, the burden of proof reverses and the onus lies on the merging firms to prove any available defence. In this case the undertakings must demonstrate that the claimed efficiencies are of such a magnitude as to

²⁴ Article 2(1) of the Merger Regulation 139/2004 implies that the onus of proof falls on the Commission as it states that ‘in making this appraisal, the Commission shall take into account...’. See also, L. Prete and A. Nucara, above note 2, p. 694 and B. Rompuy and C. Pauwels, above note 7, p. 17.

²⁵ *France v. Commission* para. 228, *Price Waterhouse/Coopers & Lybrand* para. 104 and *Airtours* paras 77 and 294. See also, C. Ahlborn and J. Ysewyn, EC Merger Control Regulation – Problems And Solution – The EC: Is The Turkey Really Voting For Christmas?, *Comp. Law*, 2002, 301-309, p. 304, D. Bailey, above note 1, p. 849, B. Etter, The Assessment Of Mergers In The EC Under The Concept Of Collective Dominance – An Analysis Of The Recent Decisions And Judgments By An Economic Approach, *World Competition*, 2000, 23(3), 103-139, p. 130 and J. Schmidt, EC Merger Control – *Airtours*: Is There A Right To Merge?, *C.L.I.*, December 2002/January 2003, 3-4, p. 4.

²⁶ Horizontal Merger Guidelines paras 87 and 91. See also, D. Wood, The Standard And Burden Of Proof In Article 82 Cases, *C.L.I.*, 2008, March, 4-6, p. 5, M. Alfter, S. Bishop and E. Mahr, New Horizontal Merger Guidelines, Plugging The Gap Or Opening The Floodgates?, *Business Law International*, 2004, 5(3), 385-399, p. 398 and D. Bailey, above note 1, p. 878.

outweigh the negative effects of the merger on competition or that the firm involved in the acquisition is failing²⁷.

(D) STANDARD OF PROOF

(1) Introduction

The standard of proof that may be applicable in merger cases can be differentiated according to the threshold that must be met in order to establish anticompetitive effects. On the one hand, the standard of proof may be set at a relatively low threshold and it is being defined under the balance of probabilities, in which case a claimant's assertion is deemed to be established if it appears 'more likely than not' according to the evidence presented to the Court²⁸. A crucial feature of the probabilities standard is that it is flexible in its nature, as its intensity can vary according to the interests at stake and it can move across the spectrum of probabilities, i.e. from a 'pure' balance of probabilities to the highest degree of probability that can be required under this standard²⁹. On the other hand, the standard of proof may be set at a very high threshold, in terms of the 'beyond reasonable doubt' standard, which approximates the degree of certainty³⁰. This standard of proof is not suitable for the appraisal

²⁷ The merging firms claiming that efficiencies will materialize as a result of the concentration must prove the fulfilment of the conditions set out in the Horizontal Merger Guidelines paras 79-86. The merging firms may also rely on the failing firm defence and in such a case the concentration will be cleared if it satisfies the conditions contained in the Horizontal Merger Guidelines para. 90. Note also the discussion on the requirements that need to be met for the establishment of the efficiencies and the failing firm defences at Ch. 4. See also, P. Lowe, *The Future Of EU Merger Control*, Comp. Law, 2002, 310-317, p. 314.

²⁸ D. Demougin and C. Fluet, above note 1, p. 1, Y. Botteman, above note 2, p. 74 and D. Bailey, above note 1, p. 852.

²⁹ D. Bailey, above note 1, pp. 852-853 and B. Vesterdorf, above note 2, p. 6.

³⁰ D. Bailey, above note 1, p. 852 and B. Vesterdorf, above note 2, p. 6.

of concentrations, because if the Commission would be required to establish its case at such a high threshold, it would be almost impossible to prohibit a merger³¹. Specifically, this threshold would demand the Commission to base its conclusions on very solid evidence and such a requirement would be in contradiction with the prospective nature of analysis undertaken in concentrations, whilst it would imply that mergers which were likely to harm the consumers would be permitted.

(2) The Standard Of Proof In Collective Dominance Cases

The assessment of collective dominance merger cases is characterised by an ambiguity on the precise degree of likelihood at which the Commission must establish that a concentration would lead to tacit coordination between the market participants post-merger. In particular, the Merger Regulation 139/2004 does not make any express reference on the standard of proof applied in merger proceedings³². Also, the past collective dominance precedent reveals that the Courts have always referred to the ‘requisite legal standard’, without however explaining in detail how high this standard was³³. Consequently, the Commission is confronted with the fact that the evidentiary threshold that it must meet before reaching a decision on the compatibility or incompatibility of a concentration with the Common Market has not been precisely specified. Nevertheless, it is possible to indirectly ascertain the level of such a threshold by focusing on some judicial inferences as regards the standard of proof applied in collective dominance merger cases and by emphasising on some factors inherent in such an assessment.

³¹ B. Rompuy and C. Pauwels, above note 7, p. 17.

³² B. Rompuy and C. Pauwels, above note 7, p. 18.

³³ L. Prete and A. Nucara, above note 2, p. 694.

(I) The Courts' Decisions

The Courts have repeatedly declared that in collective dominance cases the Commission has to establish to the 'requisite legal standard' the assertions it seeks to make in assessing whether a merger would be compatible or incompatible with the Common Market³⁴. Therefore, in *France v. Commission* the ECJ stated that the Commission must establish to the 'necessary legal standard' the anticompetitive behaviour of the market participants, while in *Airtours* the GC held that the Commission failed to prove to the 'requisite legal standard' that the concentration would give rise to a collective dominant position³⁵. Also, in *Impala* the GC annulled the *Sony/BMG* decision, because the Commission did not meet the 'requisite legal standard' in authorizing the merger³⁶. Nonetheless, the 'requisite legal standard' expression does not reveal a clear standard of proof and it seems that the Courts have deliberately avoided to precisely define such a threshold, in order to retain a flexibility in its application given the case-by-case assessment of collective dominance in mergers³⁷. Also, it must be noted that, despite the Courts' consistent use of the 'requisite legal standard' terminology, the actual application of such a standard presents variations. This is evident by the fact that the standard of proof for prohibition decisions was raised in *Airtours* where the GC set out in a strict manner the cumulative and necessary conditions that must be established in order to reach a coordinated outcome and was relaxed

³⁴ B. Vesterdorf, above note 2, p. 19 and B. Rompuy and C. Pauwels, above note 7, p. 18.

³⁵ *France v. Commission* para. 228 and *Airtours* para. 294. See also, C. Ahlborn and J. Ysewyn, above note 25, p. 304 and B. Rompuy and C. Pauwels, above note 7, p. 2.

³⁶ *Impala* paras 294, 449, 459, 475 and 535. See also, C. Harris, European Merger Review - Tightening Control While Expanding Third Party Power, North Carolina Journal Of International Law And Commercial Regulation, 2007-2008, 33, 337-357, p. 342.

³⁷ D. Bailey, above note 1, p. 848, B. Vesterdorf, above note 2, p. 19 and C. Ahlborn and J. Ysewyn, above note 25, p. 307.

in *Impala* where the GC introduced the indirect test, while simultaneously in the latter judgment the threshold of proof for clearance decisions was raised by the establishment of a symmetrical standard for both authorisation and prohibition decisions³⁸.

Even though the Courts' judgments have not expressly agreed and settled to a definite standard of proof, they do offer some indications on the actual level of the threshold of proof that is applied in collective dominance merger cases. Thus, in *France v. Commission* the ECJ held that the merger's effects on competition must be assessed on the basis of a sufficient degree of probability³⁹. Also, according to the AG's Opinion in *Sony*, the Commission should base its decision on the market development which, on the balance of probabilities, it considers most likely at the end of its investigation of a concentration⁴⁰. Moreover, the ECJ in *Sony* adopted the formulation of the 'most likely outcome' arising from a concentration and its effects on the market⁴¹. Accordingly, since the Courts' focus is on a degree of 'probabilities' or 'likelihood', it must be submitted that the standard of proof faced by the Commission in collective dominance cases is to establish on the balance of probabilities the compatibility or incompatibility of a concentration with the Common Market.

(II) Factors Affecting The Standard of Proof

Various factors have affected the formulation of the standard of proof in collective dominance merger cases. These factors revolve around the prospective nature of the analysis,

³⁸ B. Rompuy and C. Pauwels, above note 7, p. 18.

³⁹ *France v. Commission* para. 246.

⁴⁰ *Sony* Opinion (Opinion Of Advocate General Kokott, *Sony v. Impala* [2007], ECR I-4951 [2008]) para. 208.

⁴¹ *Sony* paras 51-52.

the time restrictions imposed on the Commission and the complexity of the economic assessments.

Specifically, the Commission employs a prospective analysis in the appraisal of collective dominance merger cases and accordingly the decision to clear or to prohibit a concentration depends on an assessment of probability which is made ex-ante⁴². In a prospective analysis it is not possible to speak of certainties, as the likelihood of a future event must be based on plausible inferences that may be drawn from an existing situation, and the standard of proof should endorse the difficulties inherent in an ex-ante analysis⁴³. Also, the relatively short time frame within which the decisions must be made under the Merger Regulation affects the Commission's ability to satisfy the evidentiary standard of proof⁴⁴. Therefore, the standard of proof applicable in collective dominance merger cases must take into account the limited period of time that is available to the Commission in order to collect the evidence and properly assess a concentration. Lastly, even though in *Sony* the ECJ held that the degree of complexity of an anticompetitive theory may not in itself influence the formulation of the standard of proof, it seems that the Court implied that such complexity is a factor which in combination with other elements may contribute to the adjustment of the standard of proof, i.e. the complexity inherent in the theory of coordination that is related to the oligopoly problem may affect the level of the threshold of proof⁴⁵. Also, this is illustrated by the fact that the Commission enjoys a margin of discretion in undertaking

⁴² *France v. Commission* para. 221, *Gencor* para. 163, *Airtours* para. 63, *Impala* para. 248, *Sony* Opinion para. 205 and *Sony* para. 120. Note also the discussion on the prospective analysis undertaken in mergers at Ch. 2.

⁴³ Y. Botteman, above note 2, p. 77 and B. Vesterdorf, above note 2, p. 27.

⁴⁴ D. Bailey, above note 1, pp. 880-881.

⁴⁵ *Sony* para. 51.

complex economic assessments, which reflects the difficulty to reach a conclusion in such cases and affects the adjustment of the standard of proof.

All these factors point towards the conclusion that the balance of probabilities is the threshold suitable in the adjudication of collective dominance merger cases, because it does not render impossible or minimize the Commission's ability to satisfy the requisite standard of proof. Specifically, such a standard enables the Commission to face the difficulties which characterise a prospective analysis, it takes into account the short time limits available to the Commission in order to reach a decision, it recognises the complexities involved in the establishment of tacit collusion and leaves to the Commission a margin of discretion in performing complex economic assessments.

(III) Pure Balance Of Probabilities Or Reasonable Likelihood?

Given the flexibility that is inherent in the balance of probabilities standard, as illustrated by the varying degrees of such probabilities, an important question concerns the actual level of likelihood which the Commission should meet in its fact-finding and analysis of mergers assessed for collective dominance.

In that regard, the AG's Opinion in *Sony* focused on the 'most likely' outcome of the concentration and interpreted it in such a manner as to deduce that there is a 'pure' balance of probabilities standard of proof, i.e. the AG adhered to a pure 'more likely than not' formulation⁴⁶. Nonetheless, it seems that the standard of proof in collective dominance merger cases is slightly higher than that but still certainly below the beyond reasonable doubt

⁴⁶ *Sony* Opinion paras 208, 209 and 218.

standard and the relevant judicial inferences support this opinion⁴⁷. Specifically, the *Airtours* criteria point towards a heightened standard of proof, because the cumulative presence of the four necessary conditions has to be established and accordingly every piece of evidence regarding the characteristics of the market and the firms' behaviour must point positively towards coordination⁴⁸. This heightened standard of proof is evident by the *Sony/BMG* decision where the Commission inferred from the *Airtours* judgment that the evidentiary threshold was considerably high and despite the fact that it found a high degree of concentration in the music industry as well as high market transparency therein, with the exception of transparency as regards discounts, it concluded that the available evidence was not sufficiently strong to prove tacit coordination and consequently it approved the merger⁴⁹. Also, even though the ECJ in *Sony* adopted the AG's formulation of the 'most likely' outcome, it did not interpret it in such a manner as to infer the applicability of a pure balance of probabilities standard⁵⁰. On the contrary, the ECJ held that the Commission must assess 'the plausibility of the various consequences such a concentration may have, in order to identify those which are most likely to arise' and also it required the analysis of 'plausible coordination strategies'⁵¹. Thus, the ECJ interpreted the 'most likely' formulation as being related to a plausibility threshold, which implies a standard of proof higher than a pure balance of probabilities.

⁴⁷ D. Wood, above note 26, p. 5 and B. Vesterdorf, above note 2, p. 31.

⁴⁸ F. Polverino, above note 2, p. 28.

⁴⁹ G. Aigner, O. Budzinski and A. Christiansen, *The Analysis Of Coordinated Effects In EU Merger Control: Where Do We Stand After Sony/BMG And Impala?*, 2006, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=933548, 1-28, p. 18.

⁵⁰ *Sony* paras 51-52.

⁵¹ *Sony* paras 51 and 129.

Therefore, in view of the strictness derived from the cumulative nature of the *Airtours* criteria, the Commission's application of the *Airtours* judgment in *Sony/BMG* and by taking into account the ECJ's focus on 'plausibility' in *Sony*, it is concluded that the standard of proof employed in collective dominance merger cases takes the form of a reasonable likelihood threshold. Accordingly, the standard of proof is higher than a mere 51% of probabilities, as in a pure balance of probabilities threshold, but it would be impossible and meaningless to give any estimate of a precise percentage.

(3) 'Cogent And Consistent' As Opposed To 'Convincing' Evidence

The Commission is under an obligation to gather and produce all the relevant facts which support its conclusion on the compatibility or incompatibility of a merger with the Common Market. The facts which form the basis of the Commission's decision must be accurate and solid and they must be capable to substantiate the conclusions drawn from them, as failure to do so will result in the annulment of its decision by the Courts, while the Commission must take into account all the relevant circumstances in assessing potential collusive behaviour after the completion of the concentration⁵². However, the Commission is bound to provide evidence only for those facts on which it has based its conclusions and estimations as regards the post-merger effects of the concentration under investigation on the relevant market⁵³.

⁵² For example, the GC in *Impala* found that the evidence relied upon by the Commission was not capable to substantiate its conclusion that the *Sony/BMG* joint venture would not create or strengthen a collective dominant position (paras 311 and 377). See also, Y. Botteman, above note 2, p. 78.

⁵³ *Sony* Opinion para. 206.

The collective dominance precedent reveals that the Courts have extensively focused on the evidence which the Commission is required to produce. Specifically, in *France v. Commission* and *Price Waterhouse/Coopers & Lybrand* the ECJ asserted and the Commission accepted that its decisions must be supported by a sufficiently ‘cogent and consistent’ body of evidence⁵⁴. However, in *Airtours* the GC required the Commission to produce ‘convincing’ evidence in order to meet the evidentiary standard of proof⁵⁵. Thus, an important issue is whether this change of direction signalled an adjustment of the evidentiary threshold imposed on the Commission or whether it constituted only a trivial semantic difference without any actual effect on the standard of proof.

On the one hand, some commentators support the proposition that the difference between the expression ‘convincing’ evidence as opposed to ‘cogent and consistent’ evidence is not reflecting any significant departure in *Airtours* from the approach adopted in previous judgments, since the convincing evidence formulation is simply a reflection of the essential function of evidence, which is to establish convincingly the merits of a merger decision⁵⁶. On the other hand, there is a widespread opinion that in *Airtours* the GC departed from the way the evidentiary standard of proof had been applied in previous decisions and that it raised that standard at a higher threshold, because the ‘convincing evidence’ formulation was more demanding than what the Commission had been accustomed to⁵⁷. Accordingly, the Commission was required to rely upon very strong evidence in order to establish that Article

⁵⁴ *France v. Commission* para. 228 and *Price Waterhouse/Coopers & Lybrand* paras 104-105.

⁵⁵ *Airtours* para. 63.

⁵⁶ B. Rompuy and C. Pauwels, above note 7, p. 22.

⁵⁷ E. Vranas-Liveris, *Impala v. Commission* - Changing The Tune Of European Competition Law, Chicago-Kent Law Review, 2008, 83, 1497-1521, p. 1515.

2(3) of the Merger Regulation had been satisfied⁵⁸. The latter opinion seems more justified and the departure from the previous case law was evident not so much from the language used, but from the actual approach adopted in *Airtours*, since the GC rejected virtually all of the Commission's findings as unsubstantiated⁵⁹. Moreover, the *Sony/BMG* decision could be seen as an attempt by the Commission to take into account such a higher evidentiary standard imposed by the Court⁶⁰. Also, the *Sony/BMG* decision was reversed and annulled in *Impala*, where the GC seems to have implicitly accepted the 'convincing evidence' formulation, as it placed the same heightened evidentiary standard on the Commission's clearance decisions by the introduction of the symmetrical standard of proof⁶¹.

Thus, the Commission should not merely rely on assumptions, but it must produce strong and convincing evidence, which justify the conclusion that tacit collusion would take place between the market participants post-merger, by carrying out a close examination of the circumstances that are relevant in the assessment of the effects of the concentration on competition⁶².

(4) The Symmetrical Standard Of Proof

(I) Symmetry In Clearance And Prohibition Decisions

⁵⁸ D. Bailey, above note 1, pp. 846-847.

⁵⁹ D. Bailey, above note 1, pp. 860-861.

⁶⁰ F. Polverino, above note 2, p. 36 and B. Rompuy and C. Pauwels, above note 7, p. 3.

⁶¹ E. Vranas-Liveris, above note 57, p. 1515, C. Harris, above note 36, p. 349 and Simpson and Thacher, The European Court Of First Instance Annuls The European Commission's Decision Approving The *Sony/BMG* Joint Venture, 2006, available at <http://www.simpsonthacher.com/content/publications/pub5558.pdf>, 1-3, p. 3.

⁶² *Airtours* para. 63 and *Impala* para. 248.

An important development in the area of proof in collective dominance merger cases is consisted by the establishment of a symmetrical standard of proof. In that regard, while prior reversals in collective dominance cases such as *Airtours* involved concentrations that had been prohibited by the Commission, in *Impala* the GC annulled the Commission's decision on the ground that it did not satisfy the required standard of proof for clearing the concentration and accordingly the Court raised the standard of proof for declaring a merger compatible with the Common Market at the same level as that required for a prohibition decision⁶³. This was made clear in *Sony* where the ECJ expressly referred to and applied a symmetrical standard of proof between compatibility and incompatibility decisions.

In particular, the ECJ in *Sony* followed the AG's Opinion by holding that there was no difference between the legal requirements that were necessary to be established in order to reach a clearance or a prohibition decision, because Articles 2(2) and (3) of the Merger Regulation were linguistically structured in a perfectly symmetrical manner and consequently there was nothing which presumed the application of a different standard of proof in each type of decision⁶⁴. The ECJ derived from this equal obligation a symmetrical standard of proof, as it held that the Commission had to meet the same threshold in both instances, i.e. although the Commission had to satisfy the conditions of Article 2(3) of the Merger Regulation in order to prohibit a concentration the same was true in relation to the conditions of Article 2(2) in order to reach a clearance decision⁶⁵. Accordingly, the Merger Regulation does not contain any presumption of legality or illegality in the appraisal of horizontal

⁶³ B. Rompuy and C. Pauwels, above note 7, pp. 3-4 and 22.

⁶⁴ *Sony* Opinion paras 212-214 and *Sony* para. 46. See also, M. Walton, The *Bertelsmann/Sony* Appeal – Advocate General Kokott's Opinion, C.L.I., 2008, February, 7-8, p. 8.

⁶⁵ *Sony* para. 52.

mergers, but on the contrary it is underpinned by a principle of neutrality towards the lawfulness of concentrations examined for collective dominance⁶⁶.

The current position, which consists of a symmetrical standard of proof, contradicts the former position adopted in cases such as *Airtours*, where there was a presumption that, if the Commission could not establish the prohibition of a merger, it would have to issue a clearance decision. However, if such a presumption would be accepted as a feature of the Merger Regulation, the standard of proof would be asymmetrical with a correspondingly higher standard for prohibitions and a lower standard for authorisations. Such a position would lead to the unjustified clearance of anticompetitive concentrations, because the Commission would have to clear a transaction in the absence of sufficient evidence of its incompatibility, even if it believed that the risks that the merger would significantly impede effective competition in the relevant market were similar to the probabilities that this would not happen⁶⁷. Specifically, the *Sony/BMG* decision demonstrates the drawbacks of an asymmetrical standard of proof, since the Commission cleared the merger for the reason that the evidence was not sufficient in all respects to support a prohibition decision⁶⁸. Nonetheless, after the *Impala* and *Sony* judgments, the Commission must not find in favour of the concentration in case of doubt and it cannot clear mergers that are not demonstrably objectionable, but rather it must take a fully reasoned decision based on sound evidence and it must meet the same standard of proof in both prohibition decisions as well as in decisions declaring a concentration compatible with the Common Market⁶⁹.

⁶⁶ *Sony* Opinion para. 219 and *Sony* para. 48. See also, B. Vesterdorf, above note 2, p. 28.

⁶⁷ L. Prete and A. Nucara, above note 2, p. 698.

⁶⁸ B. Rompuy and C. Pauwels, above note 7, p. 32.

⁶⁹ B. Rompuy and C. Pauwels, above note 7, pp. 24-25.

(II) Exclusive Application Of Symmetry To Horizontal Mergers

The standard of proof in mergers is not uniform, since much will depend on the type of concentration assessed⁷⁰. Specifically, the symmetrical standard of proof applies only to horizontal mergers, which are underlined by a presumption of neutrality as regards their effects on the relevant market under investigation. Conversely, such symmetry is not applicable to vertical and conglomerate mergers, because in these types of concentrations there is a presumption in favour of a clearance decision that derives from the provisions of the Non-Horizontal Merger Guidelines⁷¹. This was clearly illustrated in *Tetra Laval v. Commission*, where the GC held that a higher standard of proof would have to be established in prohibition as opposed to clearance decisions in conglomerate mergers and it recognized that the effects of such mergers were in principle considered to be neutral or even beneficial to competition⁷². In the appeal, the ECJ in *Commission v. Tetra Laval* drew attention to the difficulties of proving leveraging and pointed towards a higher standard indispensable in prohibition as opposed to clearance decisions in conglomerate mergers, thereby essentially holding that an asymmetrical standard of proof is applicable in such concentrations⁷³.

⁷⁰ D. Bailey, above note 1, p. 864.

⁷¹ The Non-Horizontal Merger Guidelines paras 13-14 indicate that in the analysis of vertical and conglomerate mergers there is a prevailing presumption that such concentrations are motivated by efficiency considerations. On the contrary, no such presumption exists in the Horizontal Merger Guidelines.

⁷² *Tetra Laval BV v. Commission* (Case T-5/02 [2002], ECR II-4381 [2002], 5 CMLR 1182 [2002]) para. 155. Also, in *Tetra Laval* paras 148 and 153 the GC held that in order to declare a conglomerate merger incompatible with the Common Market the Commission must prove that, in the relatively near future, a dominant position would be created or strengthened ‘in all likelihood’. See also, B. Vesterdorf, above note 2, p. 20.

⁷³ *Commission v. Tetra Laval* (Case C-12/03 P [2005], ECR I-987 [2005]) para. 44. See also, B. Rompuy and C. Pauwels, above note 7, pp. 20-21.

(III) *The 'Grey Area' Cases*

The 'grey area' cases refer to those situations in which there is neither sufficient evidence for the existence of anticompetitive effects, nor sufficient evidence for the absence of such effects⁷⁴. Thus, there is a problem as to how to reach a decision in those circumstances, which centres on the question of who should be given the benefit of the doubt in a close case⁷⁵. This issue is all the more important after the establishment of the symmetrical standard of proof in horizontal mergers, since the Commission cannot clear a concentration when confronted with ambiguous evidence and retains its doubts as to the precise impact of the merger on the market, but it must take a positive decision and prove its case.

The AG's Opinion in *Tetra Laval* stated that in grey area cases the Commission should authorise the notified transaction, thereby essentially holding that there exists a presumption of compatibility in the assessment of vertical and conglomerate mergers⁷⁶. Accepting this line of argument, even though partly mitigating its application, the AG's Opinion in *Sony* identified such a situation where a presumption in favour of a clearance decision in horizontal mergers could exist, but confined this exception only in a very limited

⁷⁴ *Tetra Laval* Opinion (Opinion Of Advocate General Tizzano, *Commission v. Tetra Laval* [2004], ECR I-992 [2005]) para. 76 and *Sony* Opinion para. 223. Note that this type of 'grey area' cases differs from the 'grey area' cases analysed in relation to the applicability of the *Impala* test at Ch. 2. Specifically, in the former situation there would be insufficient evidence in total, whilst in the latter case there may be absence of direct evidence but presence of sufficient indirect evidence in order to reach a decision.

⁷⁵ G. Aigner et al., above note 49, pp. 19-20 and 26.

⁷⁶ *Tetra Laval* Opinion paras 75-81. See also, S. Volcker and P. Charro, *Tetra Laval – A Landmark Judgment On EC Merger Control*, C.L.I., 2005, March, 3-5, p. 4.

class of borderline cases⁷⁷. The AG asserted that in such cases the unclear state of available evidence meant that it was impossible to make any reliable estimation as to whether or not a dominant position would be created or strengthened and submitted that these ought to be cleared⁷⁸.

However, the GC decision in *Impala* and the ECJ ruling in *Sony* suggest that a grey area where the merging firms are given the benefit of the doubt does not exist, since in neither of these cases is there any express provision for an exception to the symmetrical standard of proof⁷⁹. Hence, there should be no presumption in favour of the legality of horizontal mergers, as symmetry is absolute and grey area cases should still be decided positively in order to reach either a clearance or a prohibition decision according to the relevant standard of proof. The justification for such a position is centred on the fact that a presumption in favour of clearance decisions in grey area cases would create a precedent pointing towards the compatibility of horizontal mergers, which would affect the wider framework of assessment in horizontal concentrations examined for collective dominance and at least partly reverse the established symmetrical standard of proof.

(IV) Standard Of Proof And Types Of Errors

⁷⁷ *Sony* Opinion para. 223. See also, M. Walton, above note 64, p. 8.

⁷⁸ However, the AG stated that it is not possible to derive from this category of cases a more far-reaching general presumption that horizontal concentrations are compatible with the Common Market.

⁷⁹ The ECJ in *Sony* para. 49 expressly referred to Article 10(6) of the Merger Regulation and held that this provision did not mean that a presumption in favour of a clearance decision existed, but that it provided an exception in favour of mergers only in cases of inaction by the Commission which was not to be extended further.

Errors are likely in the decision making as the imperfect economic and legal understanding limits the Commission's ability to accurately weigh the anticompetitive costs and the pro-competitive benefits of mergers in each and every case⁸⁰. Specifically, errors are highly likely in collective dominance cases, because the inconclusiveness of game theory leads to an inability to accurately determine the outcome of a concentration in each and every oligopolistic market structure. Moreover, since in the assessment of mergers for collective dominance the Commission must examine ex-ante the future behaviour of the firms, it is difficult to have enough information in order to distinguish pro-competitive from anticompetitive concentrations with complete accuracy and accordingly some mistakes are inevitable⁸¹. Therefore, the adjustment of the standard of proof must take into account the fact that there will always be doubts as to the precise impact of a merger on competition and it should make an effort to minimize the costs of judicial mistakes according to the 'error cost approach' which is used in the analysis of the welfare effects of the rule making, i.e. the cost of error depends on the consequence of error⁸². In that regard, since the cost of error in collective dominance merger cases is considered to be enormous, having in mind on the one hand the hugely detrimental effects of the existence and exercise of a collective dominant position post-merger to the consumers' welfare and on the other hand the costs of the prohibition of a pro-competitive concentration in an oligopolistic market, it is essential to minimize any errors in the outcome of such cases.

⁸⁰ D. Evans, How Economists Can Help Courts Design Competition Rules - An EU And US Perspective, *World Competition*, 2005, 28(1), 93-99, p. 95 and J. Cooper, L. Froeb, D. O'Brien and S. Tschantz, Does Price Discrimination Intensify Competition? - Implications For Antitrust, *Antitrust L.J.*, 2005, 72, 327-373, p. 358.

⁸¹ D. Bailey, above note 1, p. 886.

⁸² D. Evans, above note 80, p. 95 and M. Davis, The Value Of Truth And The Optimal Standard Of Proof In Legal Disputes, *J.L.Econ.&Org.*, 1994, 10, 343-359, p. 349.

Moreover, the determination of the standard of proof is closely connected with the ‘false negatives’, i.e. Type I errors which refer to welfare increasing mergers that are wrongly prohibited, and the ‘false positives’, i.e. Type II errors where concentrations that are welfare reducing are wrongly allowed, weighing in the decision making⁸³. In that regard, there are conflicting opinions as to which type of error is more harmful to the consumers. One view is that it is far more detrimental to the consumers’ welfare if the Commission and the Courts commit Type II errors, on the basis that in borderline cases the overall objective of the Merger Regulation may be better served by a prohibition or a conditional clearance decision rather than by an unconditional clearance, because permitting a merger to harm the market structure, i.e. a Type II error, is far worse than prohibiting a harmless concentration, i.e. a Type I error⁸⁴. The opposite view asserts that the occurrence of a Type I error is more detrimental to the consumers’ welfare than the occurrence of a Type II error, since in the case of a prohibition decision the merger would evaporate forever, whereas in the case of an authorisation judgment, if competition problems later arise, they can be controlled ex-post by the application of Article 102⁸⁵. In principle, any legal standard is likely to make both types of errors and consequently the Commission and the Courts have faced the dilemma of having to trade-off these types of errors against each other⁸⁶. In that regard, the Commission and the Courts adhered to the latter approach, i.e. they focused on the minimisation of Type I errors

⁸³ J. Cooper et al., above note 80, pp. 358-359, Y. Botteman, above note 2, p. 74, S. Voigt and A. Schmidt, *Making European Merger Policy More Predictable*, Springer, First Edition, 2005, p. 36 and L. Sörgard, *Merger Policy: Enforcement And Deterrence*, 2009, available at <http://www3.interscience.wiley.com/cgi-bin/fulltext/122579678/PDFSTART>, 1-25, p. 9.

⁸⁴ D. Bailey, above note 1, pp. 871 and 886.

⁸⁵ *Tetra Laval* Opinion para. 81. See also, B. Vesterdorf, above note 2, pp. 28-29.

⁸⁶ Y. Katsoulacos and D. Ulph, *On Optimal Legal Standards For Competition Policy: A General Welfare-Based Analysis*, *J.Ind.Econ.*, 2009, 57(3), 410-437, p. 412.

and on balance they regarded as less detrimental the occurrence of Type II errors, because they were based on the assumption that firms merge with the goal of improving their efficiency and also they relied on the premise that the cost of a false conviction on consumer welfare greatly outweighs that of a false acquittal⁸⁷.

The adoption of a symmetrical standard of proof in *Impala* and *Sony* modified the position on which type of error is more detrimental to the consumers in the examination of collective dominance merger cases. Specifically, since the Commission is bound to prove at the same standard of proof both clearance and prohibition decisions and this is absolute in the sense that it applies even in ‘grey area’ cases, the favouritism towards either Type I or Type II errors has currently diminished in importance, i.e. neither type of error prevails but on the contrary they carry equal weight. Accordingly, this development facilitates the removal of any presumption in favour of the compatibility of horizontal mergers.

(E) JUDICIAL REVIEW

(1) Introduction

Article 21(2) of the Merger Regulation 139/2004 confers on the Courts the power to review the legality of the Commission’s decisions, as it provides that the Commission’s exclusive jurisdiction in the field of concentrations is subject to judicial review by the Courts. Also, Article 263 TFEU states that the role of the Courts is limited to simply verify whether the Commission’s decisions are lawful or not.

⁸⁷ *Tetra Laval* Opinion para. 79. See also, J. Gual, Time To Rethink Merger Policy?, C.P.I., 2007, 1(3), 29-44, p.

The Courts review the Commission's decisions for errors of law, i.e. whether the legal principles of the concept of collective dominance were applied correctly, errors of fact, i.e. whether the factual evidence used is convincing and adequately supports the application of the coordinated effects theory of harm, manifest errors in the Commission's assessment, i.e. whether its assessment was sound, absence of reasoning and whether the proper procedure was followed⁸⁸.

The intensity of judicial review varies, since it depends on whether the Courts are reviewing the correctness of facts and the correct application of the law or whether they are reviewing the correctness of the Commission's appreciation in complex economic matters. Specifically, in the first situation the Courts have full jurisdictional control and there is no room for the Commission's discretion, whilst in the second situation the Courts have restrained control and they must respect the Commission's margin of discretion by not exceeding the boundaries of their review, which is limited to the determination of whether there is a manifest error of assessment⁸⁹.

(2) Standard Of Judicial Review: The Manifest Error Of Assessment

The standard of judicial review refers to the standard applied by the Courts when they are reviewing the legality of a Commission's decision on appeal⁹⁰. The standard applied in

⁸⁸ *EDP v. Commission* (Case T-87/05 [2005], ECR II-3745 [2005]) para. 151. See also, Y. Carson, Judicial Interference: Redefining The Role Of The Judiciary Within The Context Of US And EU Merger Clearance Coordination, *Vanderbilt Journal Of Transnational Law*, 2007, 40, 1543-1577, pp. 1552 and 1554, B. Vesterdorf, above note 2, p. 27 and A. Weitbrecht, above note 5, p. 50.

⁸⁹ *France v. Commission* paras 223-224, *Sony* para. 69, *Tetra Laval* Opinion paras 85-86 and *Commission v. Tetra Laval* para. 39. See also, B. Vesterdorf, above note 2, pp. 12, 15 and 17.

⁹⁰ B. Vesterdorf, above note 2, pp. 7 and 17.

those circumstances is the manifest error of assessment, which centres on the question of whether the Commission has based its conclusions on evidence that is factually accurate, reliable and consistent as well as whether the relevant evidence is capable to substantiate its analysis and conclusions⁹¹. Therefore, where the evidence does not support the Commission's conclusions, the Courts must find that the Commission has committed a manifest error of assessment and consequently annul all or portion of its decision⁹². The manifest error of assessment standard is limited to ascertain whether the error is so erroneous or irrational as to amount to an infringement of the provisions of the TFEU and/or EU secondary legislation, while it presupposes that the failure to observe legal provisions is so serious that it appears to arise from an obvious error in the evaluation of the situation⁹³.

The manifest error of assessment standard has been widely used in the Courts' exercise of judicial review in collective dominance merger decisions. Thus, in *Airtours* the GC overturned the Commission's decision on the ground that it was vitiated by a series of errors of assessment in the evaluation of the concentration for the likelihood of collective dominance⁹⁴. Also, in *Impala* the GC annulled the Commission's decision on the basis of a manifest error in the assessment of market transparency, as it was held that the factual basis of the decision was incomplete and incapable to substantiate the Commission's conclusions on the absence of transparency⁹⁵.

⁹¹ *Sony* Opinion para. 209. See also, D. Bailey, above note 1, p. 853.

⁹² B. Vesterdorf, above note 2, p. 18.

⁹³ *RJB Mining Plc v. Commission* (Case T-156/98 [2001], ECR II-337 [2001]) para. 87.

⁹⁴ *Airtours* para. 294. See also, C. Ahlborn and J. Ysewyn, above note 25, p. 302 and J. Schmidt, above note 25, p. 4.

⁹⁵ *Impala* para. 542.

(3) The Commission's Discretion In Complex Economic Assessments

The Commission performs complex economic assessments in order to evaluate the likely effects of a proposed concentration on the relevant market⁹⁶. Within that context the Commission is required to adopt a prohibition or a clearance decision in accordance with its assessment of the economic outcome of the concentration, while its selection and use of economic theories must be supported by the relevant facts⁹⁷. The Commission enjoys a margin of discretion in analysing complex economic situations in order to determine whether a concentration would give rise to a risk of collective dominance, while the judicial review exercised by the Courts must take into account the Commission's discretion. Such discretion dictates that in performing economic assessments the Commission is not required to apply or rely on the criteria developed in prior cases⁹⁸. The rationale of the Commission's discretion lies on the inherent complexity in carrying out economic assessments as well as on the prospective nature of merger analysis⁹⁹. Lastly, it should be emphasised that the Commission's margin of discretion depends on the underlying standard of proof, because the higher the standard of proof the higher the degree of judicial review and consequently the lower the level of its discretion¹⁰⁰.

⁹⁶ B. Vesterdorf, above note 2, p. 15.

⁹⁷ *Sony* para. 52.

⁹⁸ B. Etter, above note 25, p. 128.

⁹⁹ D. Bailey, above note 1, p. 869.

¹⁰⁰ For example, the AG in *Sony* Opinion para. 210 stated that 'it would be difficult to reconcile a higher standard of probability (than the 'more likely than not' standard) with the margin of discretion allowed to the Commission in its assessment of complex economic situations' thereby affirming the close connection of the standard of proof with the degree of judicial review and the extent of the Commission's discretion.

The Courts have acknowledged that the Commission enjoys a margin of appreciation in the assessment of the economic effects of mergers examined for collective dominance¹⁰¹. Thus, in *France v. Commission, Gencor* and *Airtours* the Courts held that the Commission enjoys a certain degree of discretion in undertaking assessments of an economic nature¹⁰². Also, in *Sony* the ECJ recognized the Commission's margin of appreciation in matters which required the exercise of economic analysis, as it held that review by the GC is limited to the establishment of whether the evidence relied upon are factually accurate and whether there is absence of a manifest error of assessment¹⁰³. Therefore, in the absence of a manifest error of assessment, the Commission's findings should remain undisturbed, provided that they are capable of explanation by reference to the relevant facts, and this provision holds firm even where it might be possible for the Courts to reach a different conclusion on those facts, since the Commission's discretionary margin implies that the same evidence may result in more than one equally plausible conclusion¹⁰⁴. Hence, the role of the Courts is merely to review the legality of the Commission's decisions and they should not substitute their opinion as to the economic assessment conducted in a case examination for that of the Commission's on the sole basis that they would have reached a different conclusion on whether the merger is compatible with the Common Market, i.e. the Courts should abstain from entering into the merits of the Commission's complex economic assessments¹⁰⁵. Accordingly, the Courts exceed their limits of judicial review where the facts and the evidence of a case reasonably

¹⁰¹ B. Louveaux and P. Gilbert, *The Standard Of Proof Under The Competition Act*, E.C.L.R., 2005, 26(3), 173-177, p. 176.

¹⁰² *France v. Commission* paras 223-224, *Gencor* paras 164-165 and *Airtours* para. 64.

¹⁰³ *Sony* paras 69 and 144.

¹⁰⁴ E. Burrows, *Review Of Merger Decisions By The CAT: A Question Of Evidence*, *Comp. Law*, 2006, 5(3), 169-183, p. 177 and D. Bailey, above note 1, p. 861.

¹⁰⁵ *Tetra Laval* Opinion para. 89.

allow different evaluations, the Commission adopts one of them, and the Courts substitute their own different assessment for that of the Commission's¹⁰⁶.

However, in practice it seems that the Commission's margin of discretion is not unfettered, as the Courts have indirectly minimized such discretion in collective dominance merger cases by repeatedly relying on the basis that the conclusions of its economic assessments were not supported by economic theory or the facts of the particular case¹⁰⁷. Specifically, in *Airtours* the GC rejected most of the Commission's findings partly for lack of evidence to substantiate them and partly because it was held that the Commission made errors of assessment in the application of certain economic theories concerning coordination¹⁰⁸. Also, even though in *Impala* the GC acknowledged the wide discretion enjoyed by the Commission in carrying out the prognosis of a merger's potential competitive effects, it held that the Commission's decision was unsupported by facts that were sufficiently 'accurate, reliable and consistent'¹⁰⁹. Furthermore, the AG in *Sony* asserted that it would be an error to assume that the Commission's margin of discretion precludes the Courts from giving their own analysis of the facts and the relevant evidence¹¹⁰. Also, the ECJ in *Sony* held that, despite the Commission's wide margin of discretion on matters which require economic analysis, the Courts must evaluate whether the Commission has used all the necessary and

¹⁰⁶ *Sony* Opinion para. 240.

¹⁰⁷ D. Bailey, above note 1, p. 861.

¹⁰⁸ *Airtours* para. 294.

¹⁰⁹ *Impala* paras 328 and 459.

¹¹⁰ *Sony* Opinion para. 239.

most reliable data to substantiate its underlying conclusion¹¹¹. Accordingly, these cases reveal that in practice the GC and the ECJ have a tendency to carefully examine whether the quality of the factual evidence underpinning the Commission's economic theories is sufficiently convincing to discharge the standard of proof, i.e. the need to respect the Commission's margin of discretion does not prevent the Courts from looking closely at its analysis¹¹². Nevertheless, it seems that in carrying out such an examination the Courts have interfered with the Commission's discretion in complex economic matters.

Case Study On The Extent Of The Commission's Discretion: *Impala* And *Airtours*

The *Impala* judgment is a characteristic example of the GC's interference with the Commission's discretion, as the Commission and the Court adopted different views on the assessment of the most decisive issue for the outcome of the case, i.e. market transparency¹¹³. Also, in *Airtours* the GC took a radical departure from the Commission's economic assessments in *Airtours/First Choice*¹¹⁴.

¹¹¹ *Sony* para. 145. Also, the ECJ in *Commission v. Tetra Laval* para. 39 recognized the Commission's margin of discretion in the assessment of economic matters, but nevertheless it held that 'that does not mean that the Courts must refrain from reviewing the Commission's interpretation of information of an economic nature'.

¹¹² S. Holmes and C. Humpe, *A Pyrrhic Victory For Both Sides?*, C.L.I., 2006, January, 9-11, p. 10 and S. Volcker and P. Charro, above note 76, p. 4.

¹¹³ Y. Carson, above note 88, p. 1568.

¹¹⁴ Note also that in *Tetra Laval* and *Schneider Electric SA v. Commission* (Case T-310/01 [2002], ECR II-4071 [2002], 4 CMLR 768 [2003]) errors of assessment relating to the Commission's economic analysis of the anticompetitive effects of the concentrations was the reason for the annulment of its decisions. Thus, in *Tetra Laval* the GC held that the economic analysis carried out by the Commission was based on insufficient evidence and some errors of assessment. Nevertheless, the *Tetra Laval* judgment demonstrates the GC's willingness to substitute the Commission's views for those of its own and hinder the Commission's boundaries of discretion (*Tetra Laval* Opinion para. 93). Furthermore, in *Schneider* the GC examined almost every element of the

In *Sony/BMG* the Commission found that net wholesale prices, average prices, published prices to dealers and list prices appeared to be aligned and developed in parallel, which raised the question of whether there was increased market transparency that facilitated a collusive outcome. However, as regards the transparency of discounts, while the Commission found that the majors had some knowledge of their competitors' file discounts, it concluded that it could not be established that there was a sufficient degree of transparency of the rivals' campaign discounts. According to the Commission, the flexible use of campaign discounts and the resulting reduced transparency undermined a sufficient alignment of invoice discounts. Thus, the Commission's economic assessment led it to the conclusion that although pieces of evidence pointed at past or future collusion because the various prices presented some indications of price parallelism, such evidence could not be conclusive enough to prove the creation or the strengthening of a collective dominant position, because the analysis of discounts pointed towards the clearance of the merger since they were not sufficiently aligned and varied over time and from album to album, i.e. they were not sufficiently transparent to facilitate coordination¹¹⁵.

The GC's judgment in *Impala*, the appeal to *Sony/BMG*, entailed a comprehensive review of the evidence upon which the Commission relied, particularly those related to its

Commission's economic analysis and annulled its decision, because the Court found several errors, omissions and inconsistencies in the Commission's economic reasoning. See also, C. Harris, above note 36, pp. 344-345, D. Bailey, above note 1, p. 864, No Cited Author, *Schneider And Tetra* Judgments - Court Strikes Down Two European Merger Prohibitions, C.L.I., 2002, November, 9-10, p. 9, F. Ragolle, Case Comment - *Schneider Electric v. Commission*: The GC's Response To The Green Paper On Merger Review, E.C.L.R., 2003, 24(4), 176-181, pp. 176-178 and C. Ahlborn and J. Ysewyn, above note 25, pp. 302-303.

¹¹⁵ *Sony/BMG* paras 111-113 and 157.

economic findings. The GC disagreed and criticized the Commission's economic assessment by concluding that the market was adequately transparent to permit the competitors to monitor each other's prices, thereby possibly substituting its views for those of the Commission's¹¹⁶. Specifically, the GC did not accept the Commission's economic theories regarding market transparency¹¹⁷. Thus, the GC pointed to the weekly hit charts, the presence of list prices in the majors' catalogues, the fact that the average transaction prices were closely linked to the list prices, the issue that the discounts were low and showed little variation while the majors had some knowledge of the levels of each other's discounts, the close alignment of the industry net prices for 6 years as well as their maintenance at a stable level despite a fall in demand and concluded that these factors constituted indications that the market was sufficiently transparent to allow tacit coordination in prices. It is notable that the GC was of the opinion that the Commission's assessment not only did not lead to the conclusion that the market was insufficiently transparent, but on the contrary that its assessment mentioned only factors which were capable to give rise to high market transparency, with the sole exception of the rather limited and unsubstantiated assertion that campaign discounts could reduce transparency and make tacit collusion more difficult¹¹⁸. Moreover, the GC disagreed that the discount systems reduced market transparency to the point of preventing the existence of a collective dominant position and held that the Commission did not adduce any evidence in relation to the opacity of campaign discounts, while such discounts had only a limited impact on prices¹¹⁹. Accordingly, the GC held that

¹¹⁶ In particular, the GC held that the Commission's appraisal of the transaction was 'extremely succinct' (para. 525) and its observation of the market 'superficial' and 'purely formal' (para. 528). See also, B. Rompuy and C. Pauwels, above note 7, pp. 14-16.

¹¹⁷ *Impala* paras 289-459. See also, E. Vranas-Liveris, above note 57, p. 1510.

¹¹⁸ *Impala* para. 294.

¹¹⁹ *Impala* paras 309, 317 and 428.

the Commission's findings were vitiated by a manifest error of assessment, since they were not capable to support the conclusion that the market was not sufficiently transparent to establish a collective dominant position¹²⁰.

The GC's assessment of market transparency in *Impala* was accepted by both the AG and the ECJ in *Sony*. According to the AG, although the GC undertook its own assessment of the factual and evidential position, it clearly remained within the proper limits of judicial review of a Commission's decision in the context of merger control¹²¹. Consequently, the AG stated that the GC did not substitute its own assessment of market transparency for an equally reasonable assessment of the Commission, but that the Court merely held that the conclusions drawn by the latter were not supported by the factual basis of its decision¹²². Also, the AG asserted that the assessment carried out by the GC is part of its analysis of the facts and therefore it did not fail to respect the Commission's margin of discretion¹²³. Concurring with this line of argument, the ECJ in *Sony* held that the GC carried out an in-depth examination of the evidence underpinning the contested decision and in that context it acted in conformity with the requirements of the case-law relating to the observation of the Commission's discretion in economic matters¹²⁴.

However, despite these submissions by the AG as well as the ECJ and although the GC appeared to rely on the absence of reasoning and the absence of facts substantiating the Commission's conclusions, it seems that the annulment of its decision was also based on a

¹²⁰ *Impala* para. 459.

¹²¹ *Sony* Opinion para. 241.

¹²² *Sony* Opinion para. 245.

¹²³ *Sony* Opinion para. 245.

¹²⁴ *Sony* para. 146.

different economic assessment. In particular, the GC found that the market was sufficiently transparent for effective monitoring to take place, a conclusion contradicting the Commission's economic assessment. Furthermore, even though the GC seemed to base its reasoning for the annulment on the inadequacy of facts to support the Commission's conclusions as to the lack of transparency, it is clearly evident from the judgment that the GC simply had a different view on each factor affecting monitoring, i.e. the transparency of prices and discounts. This can be primarily demonstrated by the GC's statement that certain factors in the Commission's analysis instead of pointing towards the lack of transparency they were in favour of such a conclusion, i.e. the GC interpreted the same facts in such a manner that it reached a contradictory conclusion to the Commission's outcome. Thus, it seems that the GC intervened and replaced the Commission's economic assessment of transparency thereby effectively minimizing the discretion embodied to the latter in undertaking economic assessments.

In *Airtours* the GC extensively scrutinized the Commission's decision, it rejected almost all of its findings and criticized its economic analysis and the quality of its economic reasoning by concluding that it had incorrectly analysed the market¹²⁵. Specifically, the GC went systematically through each of the deterrents identified in the decision and concluded that none represented a credible punishment mechanism, for example it found that the Commission was wrong to conclude that the mere possibility of reverting to a situation of oversupply would act as a deterrent. Also, the GC criticized the Commission's methodology employed in the assessment of the extent to which capacity decisions adopted by each major

¹²⁵ C. Harris, above note 36, p. 344 and W. Wils, *The Combination Of The Investigative And Prosecutorial Function And The Adjudicative Function In EC Antitrust Enforcement: A Legal And Economic Analysis*, *World Competition*, 2004, 27(2), 201-224, p. 209.

tour operator for the coming seasons were sufficiently transparent for collusive behaviour to arise post-merger. Lastly, it held that the analyses of demand growth and demand volatility were flawed and that the Commission failed to give sufficient weight to the reaction of fringe players and consumers to a hypothetical reduction in output and increase in prices. Therefore, the GC concluded that the Commission's decision was vitiated by a series of errors of assessment as to whether a collective dominant position would be created¹²⁶. The judgment demonstrates the GC's willingness to rigorously and completely reassess a Commission decision, since despite recognizing the latter's discretion as regards assessments of an economic nature, the Court reversed every instance of its analysis¹²⁷.

Overall, the discretion conferred on the Commission in carrying out its economic assessments is important, especially in light of the current employment of a more economic approach, which has elevated the economic analysis of concentrations appraised for collective dominance to a central issue. Within that context, the increased effort of the Courts to diminish the Commission's margin of appreciation in matters requiring economic assessment may be interpreted as a willingness to refrain from allocating full jurisdiction to the Commission in such issues, so as to retain a significant role in the decision making through the exercise of judicial review. Also, the limitation of the Commission's discretion in *Airtours* and *Impala* is explainable by the raised threshold of proof imposed by the GC in prohibition and clearance decisions respectively due to the interrelationship between these components of proof. Nevertheless, such limitation creates difficulties on the Commission's

¹²⁶ *Airtours* para. 294.

¹²⁷ *Airtours* para. 64. See also, A. Nikpay and F. Houwen, above note 14, p. 196 and Y. Carson, above note 88, p. 1568.

ability to establish collective dominance which is solely based on the employment of an economic analysis and reasoning.

(4) The Duty To State Reasons

The Commission is under a duty to provide sufficient reasoning in relation to both its clearance as well as its prohibition decisions, while such a duty derives from Article 296 TFEU and it is intended to enable acts of the Commission to be subject to review by the Courts¹²⁸. According to the duty to state reasons, if in its assessment of a concentration the Commission attaches particular importance to certain factors, it must not only identify these factors in its decision, but it must also describe precisely their effects on the functioning of the market in question¹²⁹. Consequently, an inadequate Commission explanation as to the reasoning underlying its findings in a case examination results in the annulment of its decision by the Courts¹³⁰. The duty to state reasons was a factor that led to the annulment of the *Sony/BMG* decision, as the GC in *Impala* noted that the Commission's findings on transparency and retaliation were vitiated by insufficient statements of reasons¹³¹.

The principles underlying the duty to state reasons dictate that such reasons must be appropriate to the measure at issue¹³². Furthermore, the Commission's reasoning in deciding whether the concentration in question should be declared compatible or incompatible with the Common Market must be disclosed in a clear and unequivocal manner so as to enable the

¹²⁸ *Sony* Opinion paras 97-98. See also, M. Walton, above note 64, p. 8.

¹²⁹ *Sony* Opinion para. 128.

¹³⁰ Y. Carson, above note 88, pp. 1553-1554.

¹³¹ *Impala* paras 320, 325, 475 and 542.

¹³² *Sony* para. 166 and *Sony* Opinion para. 115. See also, M. Walton, above note 64, p. 8.

competent Court to exercise its power of review¹³³. However, the Commission is not under an obligation to provide precise reasoning on aspects which appear to it to be irrelevant or of secondary importance in the assessment of the concentration under investigation, neither it is necessary for the reasoning to go into all the relevant facts and points of law¹³⁴. Conversely, what is important is that the factual and legal considerations, which are of decisive importance to the outcome of the decision, must be capable of being understood from the reasons given¹³⁵. Accordingly, such reasoning must not be so laconic as to endanger the clarity and persuasiveness of the underlying considerations, but it must be logical and it must not disclose any inconsistencies¹³⁶. Thus, it is necessary for the Commission in collective dominance cases to substantiate the effects of each factor in its decision with specific details and it cannot simply rely on the reason that a condition could make tacit collusion easier or more difficult¹³⁷.

(G) CONCLUSION

The issue of proof in collective dominance merger cases revolves around the questions of who bears the burden of proof, how high the standard of proof is and the intensity of judicial review, whilst there is a close interrelationship between these concepts.

In order to reach a prohibition decision in collective dominance merger cases the Commission must prove that the concentration under investigation would significantly impede effective competition by leading to tacit collusion between the oligopolists post-

¹³³ *Sony* para. 166 and *Sony Opinion* para. 115.

¹³⁴ *Sony* paras 167 and 180 and *Sony Opinion* paras 116 and 118.

¹³⁵ *Sony* para. 169.

¹³⁶ *Sony* para. 169 and *Sony Opinion* para. 119.

¹³⁷ *Sony Opinion* para. 129.

merger. On the one hand, the Commission must satisfy the significant impediment to effective competition standard in order to demonstrate the incompatibility of a concentration with the Common Market under the Merger Regulation 139/2004. On the other hand, proof of tacit collusion revolves around the cumulative fulfilment of the *Airtours* conditions, while the GC in *Impala* held that in the assessment of pre-existing collective dominance such criteria may be established indirectly thereby relaxing the evidentiary obligations that the Commission must meet and the ECJ in *Sony* imposed the requirement to form a hypothetical coordination mechanism as the basis for the assessment of these tests.

The Commission bears the onus to define the relevant market and to prove that the probability of harm deriving from the anticompetitive effects of a collective dominant position is greater than the substantive threshold for the appraisal of mergers. If the Commission meets its burden of proof, the onus of proof reverses and the merging firms must demonstrate any available defences, i.e. efficiencies or the failing firm defence.

The Merger Regulation 139/2004 does not contain any reference on the applicable standard of proof, while the Courts have consistently referred to the ‘requisite legal standard’ in an imprecise manner. Nevertheless, in *France v. Commission* and *Sony* the ECJ adopted the balance of probabilities as the standard of proof employed in collective dominance merger cases. Also, numerous factors that characterise the assessment of mergers for collective dominance, such as the prospective nature of assessment, verify that the standard of proof should be based on the balance of probabilities. Moreover, the cumulative nature of the *Airtours* conditions as well as the ECJ’s formulation in *Sony* of the ‘most likely outcome’ of a merger on competition illustrate that the standard of proof is higher than the pure balance of probabilities threshold and takes the form of a reasonable likelihood. Additionally, the

‘convincing evidence’ requirement, as was established in *Airtours*, constituted a departure from the ‘cogent and consistent evidence’ formulation that was adopted pre-*Airtours* and highlighted a rise on the standard of proof. Furthermore, the GC in *Impala* and the ECJ in *Sony* established a symmetrical standard of proof between clearance and prohibition decisions in horizontal mergers examined for the likelihood of collective dominance, whilst such symmetry is absolute and accordingly there should be no exception in grey area cases in favour of a clearance decision, in contradiction to the position in non-horizontal mergers where the standard of proof is asymmetric. Additionally, the symmetrical standard of proof altered the weighing of Type I and Type II errors by equalizing the importance attached to each type of error.

The Courts have the power to review the Commission’s decisions in mergers and the relevant standard of judicial review is consisted by the ‘manifest error of assessment’. The Commission does not have any discretion on factual or legal matters where the Courts are capable to exercise full jurisdiction, but it enjoys a margin of appreciation in undertaking complex economic assessments. This margin of discretion has been recognized by the Courts which are required not to substitute their views for those of the Commission’s. However, in practice the Courts examine closely the Commission’s analysis and in *Airtours* and *Impala* it seems that the GC has minimized the discretion granted to the Commission [which is compatible with the respective raising of the standard of proof in prohibition and clearance decisions]. Moreover, in the context of judicial review the Commission is under a duty to state reasons and to provide explanations for its arrival at a certain conclusion in each particular case.

CHAPTER 9

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CONCLUSION: CURRENT STATUS AND FUTURE DEVELOPMENTS

(A) CURRENT STATUS

This thesis focused on the issue of collective dominance in horizontal concentrations and analysed its legal, economic and policy elements in order to examine how evidential requirements and capabilities have influenced its development.

(1) Legal Context

The proof of collective dominance in horizontal mergers is interlinked to its conceptual framework that is underpinned by the theory of tacit collusion and to the substantive threshold for intervention as set out in the Merger Regulation 139/2004. Specifically, in the appraisal of collective dominance merger cases the Commission bears the burden to demonstrate that the concentration under investigation would significantly impede effective competition either by creating or by reinforcing a situation of tacit collusion between the market participants post-merger. On the one hand, in order to reach a prohibition decision the Commission must satisfy the substantive standard contained in Article 2(3) of the Merger Regulation 139/2004 which amended the threshold employed under the Merger Regulation 4064/89, as it removed the strict necessity to establish dominance by declaring that the demonstration of a significant impediment to effective competition is the single necessary and sufficient condition in order to prove the incompatibility of a concentration

with the Common Market, whilst dominance is merely the prime example of such a situation. This afforded to the Commission the ability to prove the incompatibility of a concentration either ‘directly’, i.e. by the sole establishment of a significant impediment to effective competition, or ‘indirectly’, i.e. by the demonstration of the creation or strengthening of a dominant position that would significantly impede effective competition. Nonetheless, in contrast to unilateral effects cases, the amendment of the substantive test did not alter the intervention threshold applicable in coordinated effects cases since if the Commission would rely on the indirect demonstration of incompatibility it would still have to establish dominance, whilst if it would seek to directly demonstrate the incompatibility of a concentration it would have to fulfil the same legal test and requirements that were necessary and relevant under the dominance threshold. On the other hand, proof of tacit collusion is inherently problematic, as it concerns anticompetitive market conduct that is formed by an implicit understanding to coordinate without any type of communication and accordingly it can only be established by economic analysis and must be distinguished from mere parallel behaviour which constitutes legally acceptable conduct. The development of the concept of collective dominance in mergers was directed towards the aim to tackle tacit collusion in order to close an enforcement gap in EU Competition Law, since it was considered to be the most suitable framework to regulate such conduct, as opposed to ex-post legal instruments, due to the applicability of a more lenient threshold of proof linked to the employment of a prospective analysis, while it shed minimal emphasis on explicit collusion for the reason that in an ex-ante assessment hard evidence of an agreement or a concerted practice could be demonstrated only in marginal circumstances concerning the situation of pre-existing collective dominance and also because of the applicability of effective ex-post review for this type of collusion. The GC in *Airtours* fully equated the concept of collective dominance with the economic theory of tacit collusion. Thus, in order to prove collective dominance in

mergers and establish that the remaining firms would tacitly collude post-merger the Commission must fulfil the *Airtours* test so as to demonstrate that the oligopolists would have the ability and the incentive to adopt a common policy of coordination and to sustain such an understanding overtime, whilst these components are assessed by analysing the structural characteristics of the relevant market that would affect the firms' behavioural incentives. Evidential requirements played a central role to the introduction of the *Airtours* test, since the GC implicitly recognised the application of a low evidentiary threshold in the Commission's *Airtours/FirstChoice* decision and aimed to raise such a threshold. Accordingly, the *Airtours* test is characterised by its inherently stringent nature that has set the standard of proof applicable in the assessment of collective dominance in mergers at a higher threshold than a pure balance of probabilities standard and took the form of a reasonable likelihood threshold. Such stringency relates to the requirement that the Commission must directly demonstrate the cumulative presence of the necessary *Airtours* conditions, whilst the cumulative nature of these criteria essentially means that every piece of evidence regarding the structural characteristics of the market and the future behaviour of the firms must point towards coordination in order to establish collective dominance. Therefore, this test pointed to a higher evidentiary threshold than the early approach in the demonstration of collective dominance which was based on the application of a mere 'checklist' of descriptive factors that focused on whether a sufficient number of market characteristics pointed in favour of collusion. In addition, the *Airtours* judgment requested the Commission to bring forward 'convincing evidence' in order to satisfy the relevant standard of proof and this also points towards a higher evidentiary threshold than the 'cogent and consistent' evidence required pre-*Airtours*, as it essentially demanded the Commission to base its conclusions on strong evidence derived from a sound and detailed economic analysis. Furthermore, this heightened evidentiary threshold lowered the degree of the Commission's

discretion in undertaking complex economic assessments due to the interrelationship between these components of proof, i.e. the higher the threshold of proof the higher the degree of judicial review and consequently the lower the level of its discretion, thereby adversely affecting its ability to establish collective dominance since such a discretion is of outmost importance in tacit collusion cases where proof heavily relies on economic analysis and reasoning. The overall effect of the *Airtours* judgment is related to the imposition of demanding evidential requirements that in turn pointed towards a limitation in the enforcement of collective dominance. This was clearly illustrated in the *Sony/BMG* decision where the Commission adopted an exact application of the *Airtours* test and cleared the concentration simply because all the evidence were not in favour of coordination. Also, the effects of the *Airtours* test were extended by the fact that it was eventually integrated in the Horizontal Merger Guidelines as the relevant test for the establishment of coordinated effects. The heightened evidential requirements imposed by the *Airtours* test led to the introduction of the *Impala* indirect test. Specifically, as a response to the stringency attached to the *Airtours* test and in order to prevent the limitation in the enforcement of collective dominance, the GC in *Impala* introduced the indirect test which held that in the assessment of pre-existing collective dominance the *Airtours* conditions may be established indirectly thereby inserting a degree of flexibility in the establishment of coordination and relaxing the evidentiary threshold required in order to reach a prohibition decision. Additionally, the Court in *Impala* launched the application of a symmetrical standard of proof between compatibility and incompatibility decisions in horizontal mergers which essentially raised the standard of proof for clearance decisions so as to alleviate fears of an increasing number of ‘false positives’ that resulted from the demanding evidentiary threshold imposed for prohibition decisions in *Airtours*, but it maintained the GC’s tendency to intervene in matters which arguably fall within the Commission’s margin of appreciation. In *Sony* the ECJ

acknowledged the applicability of both the stringent *Airtours* test and the more lenient *Impala* indirect test in collective dominance merger cases, it accepted the validity of the symmetrical standard of proof and imposed an additional requirement of a contextual nature since it set out that the Commission must establish a hypothetical coordination mechanism as a basis for the application of such tests. The Commission's response to these later developments was made clear in *ABF/GBI* where it set up a coordination mechanism related to the circumstances of the case and on that basis it assessed the fulfilment of the *Airtours* test, but it refrained to examine the applicability of the *Impala* indirect test, even though such a test could be suitable to be examined on the facts of the case that focused on the reinforcement of tacit collusion. The total outcome of those developments marked by the GC's stringent *Airtours* test that raised the evidential requirements needed in order to establish collective dominance and the Commission's lack of application of the flexible *Impala* test, despite its authoritative approval by the ECJ, has led to a drop in the enforcement of collective dominance, as *ABF/GBI* forms the only intervention decision post-*Airtours*.

The concept of collective dominance in mergers is divergent to the concepts of Article 102 collective dominance and Article 101 concerted practices on the treatment of tacit collusion. On the one hand, even though collective dominance under the Merger Regulation and its corresponding theory under Article 102 are conceptually convergent on tacit collusion, their enforcement is divergent as there is total lack of precedent to address situations of tacit collusion under the concept of Article 102 collective dominance. Also, the Guidance Paper's absence of provisions on the abuse of collective dominance expressly reveals that enforcement against tacit collusion is not within the Commission's priorities. The lack of enforcement against tacit collusion under the Article 102 collective dominance concept is primarily related to the higher evidentiary threshold that would be applicable in

tacit collusion cases within such a context, as compared to the standard of proof employed in mergers, and derives from the ex-post nature of investigations, the quasi-criminal nature of infringements, but principally by the increased stringency in the application of the *Airtours* test in an ex-post context that would require pragmatic evidence on each condition and every structural characteristic pointing towards tacit collusion. Also, other relevant factors relate to the lack of implementation of an effects-based approach as well as difficulties related to the formulation of appropriate and effective remedies under Article 102 against tacit collusion. On the other hand, in contrast to the position in collective dominance under the Merger Regulation, the concept of concerted practices under Article 101 is not receptive to the control of tacit collusion as in principle it requires the establishment of contact between competitors. Conversely, parallelism alone may lead to a finding of concertation only if the Commission could prove that tacit collusion constitutes the single plausible explanation for the parallel conduct in question, which is unrealistic in view of the fact that interdependence forms part of the normal operation of oligopolies and would lead to a competitive explanation based on mere parallel behaviour. Also, the formulation of the ‘only plausible explanation’ test reflects the application of a standard of proof equivalent to the beyond reasonable doubt in Article 101 cases as it essentially requires the Commission to bring forward an undisputable economic analysis that would be capable to overcome any reasonable doubt. Overall, the highly demanding evidential requirements needed in order to establish tacit collusion under Articles 101 and 102 render them incapable to regulate such conduct. This explains the development of the concept of collective dominance under the Merger Regulation towards the specific goal to tackle situations of tacit collusion as, due to the applicability of a more lenient threshold of proof, it was considered more suitable to address such conduct.

Coordinated and unilateral effects are conceptually distinctive theories of harm as they are founded on different economic principles and a largely divergent set of necessary conditions that must be fulfilled in order to establish each anticompetitive theory. Also, coordinated and unilateral effects are divergent on the ability to demonstrate each theory of harm. Specifically, the introduction of the significant impediment to effective competition test under the Merger Regulation 139/2004 launched the theory of unilateral effects and gave to the Commission the ability to regulate the ‘gap’ cases through the ‘direct’ demonstration of incompatibility, i.e. without proof of dominance, thereby lowering the intervention threshold as such a theory of harm contains more flexible requirements than those which were necessary to be fulfilled in order to establish single firm dominance. This position contradicts the fact that, despite the alteration of the substantive test, the threshold of intervention applicable in coordinated effects cases remained unaltered. Also, the mechanism of harm is straightforward in unilateral effects and therefore it is receptive to enforcement, while the mechanism of harm is complex in coordinated effects and this factor creates difficulties in the establishment of such an anticompetitive theory. Lastly, the examination of unilateral effects has been facilitated by the development and application of the traditional econometric techniques, whilst the evolution of pricing pressure indexes further assists the assessment of such a theory of harm as they constitute an initial screening mechanism and provide some prima facie quantitative evidence of the merging firm’s incentives to raise their prices post-merger. Conversely, the lack of any corresponding set of econometric tools applicable in the scenario of coordinated effects in homogeneous markets maintains the difficulty to demonstrate such a theory of harm. Overall, these divergences on the ability to demonstrate each theory of harm explain the Commission’s increased focus on unilateral effects post-Merger Regulation 139/2004 and the respective decline in the enforcement of coordinated

effects, despite the fact that in principle no theory of harm is predominant in EU Merger Control and each applies in its own individual circumstances.

(2) Economic Context

Economic analysis plays a central role in the establishment of collective dominance in mergers as such a concept is based on the findings of game theory in relation to tacit collusion. Game theoretic analysis on tacit collusion facilitates the demonstration of collective dominance in mergers to the extent that it dictates the necessary conditions for coordination which essentially comprise the *Airtours* test and sets out the structural characteristics that must be assessed in order to determine the firms' ability and incentive to collude. Nevertheless, game theory is problematic as it produces multiple possible equilibria and accordingly it is unable to precisely predict the future effects of a concentration on the specific market under investigation. Moreover, the fact that game theory is merely a 'possibility' theory has given rise to the proposition that a strict falsification framework would be needed to be met for the admittance of game theoretic models in merger proceedings. Also, behavioural economics contradict the assumption underlying game theory that market participants behave rationally, since they emphasise on irrational conduct which leads to results contradictory to game theoretic predictions. Moreover, experimental economics expose laboratory evidence which contradict some standard insights of game theory. Overall, despite the significance of game theoretic analysis, the multiplicity of equilibria produces complexities in the establishment of collective dominance under the Merger Regulation, whilst alternative economic theories diminish the unitary value of game theory as a tool to combat collusive effects, even though such theories also expose problematic features.

(3) Policy Context

The early analysis employed in collective dominance merger cases was based on the Harvard school static SCP paradigm that focused on a simplistic assessment of a checklist of structural factors and this led to an increased level of enforcement which was in accordance with the Harvardian beliefs, whilst the objective was to protect the market participants' freedom to compete in the relevant market. Nevertheless, a gradual policy evolution materialised that aligned the analysis of collective dominance to the dictations of the industrial organisation theorists. Most clearly, the GC in *Airtours* employed a more sophisticated analysis based on a dynamic application of the SCP paradigm. Thus, instead of a static analysis of structural factors, the GC employed a dynamic assessment that focused on the interaction between structural factors and behavioural incentives which essentially attributed central focus on the likely behaviour of the market participants post-merger. Also, in contrast to the previous approach which did not focus on competitive effects, the GC emphasised on the demonstration of the impact of a concentration on competition in order to discern its welfare effects on the consumers. Lastly, the adoption of a more economic approach brought the concept of collective dominance in line with the economic theory of tacit collusion, as evident by the insertion of the *Airtours* economics-based test at the centre of the collective dominance assessment, and directed the Commission towards an increased reliance on evidence drawn from a solid and detailed economic analysis based on industrial organisation models. The totality of the requirements revolving around a dynamic, more economic and effects-based approach pointed towards a more demanding assessment that led to a decline in the enforcement of collective dominance in mergers and was in accordance with the move towards the less interventionist framework provided by the industrial organisation theorists, despite the eventual effort by the GC in *Impala* to reverse such an outcome through the introduction of the indirect test. This type of analysis was eventually

affirmed by the Merger Regulation 139/2004 substantive test and the Horizontal Merger Guidelines which also integrated the underlying policy objective that focused on the preservation of effective competition as a means to protect the welfare of the consumers. Accordingly, a consumer welfare standard is employed in the determination of the compatibility of concentrations with the Common Market that requires evidence of consumer harm in order to prohibit a concentration, whilst efficiencies directed towards the welfare of the consumers have been recognised as a defence to anticompetitive mergers.

(B) FUTURE DEVELOPMENTS

The prospective enforcement of the concept of collective dominance under the Merger Regulation needs to be strengthened and the justification for such a necessity relies on two parameters. On the one hand, the concept of collective dominance under the Merger Regulation currently constitutes the only legal mechanism by which the Commission can prevent the emergence of tacit collusion in EU Competition Law as the past precedent of collective dominance under Article 102 illustrates the total lack of decisions focusing on tacit collusive behaviour, while the concept of concerted practices under Article 101 is incapable to adequately control such conduct. On the other hand, the coordinated effects theory of harm constitutes the sole means by which the Commission can penalise tacit collusive behaviour in EU Merger Control, since unilateral effects exclusively focus on the individual non-collusive market conduct of the merged entity.

The prospective ability to prove collective dominance in mergers and the increase in future enforcement against tacit collusion may lie in the application of old methodological tools. Specifically, it is imperative for the Commission and the Courts to explore and apply the *Impala* indirect test in prospective collective dominance cases, as it would open up a new

era in the enforcement of collective dominance under the Merger Regulation and it would advance the applicability of such a concept, because it offers a more lenient avenue to demonstrate a collective dominant position beyond the strictness of the *Airtours* test. Specifically, the *Impala* test is capable to establish indirectly each one or all of the *Airtours* criteria, it introduces a flexible framework for proving the strengthening of collective dominance, it facilitates its enforcement in 'grey area' cases, it may prevent undetected or problematic Article 102 tacit collusion cases, it directs the analysis towards a more finely balanced approach between economic theory and legal considerations that facilitates the overcoming of the inconclusiveness of game theoretic models and leads towards a more interventionist direction. Moreover, the problematic feature of the indirect test that is related to its rather vague formulation may be resolved by its systematic application in the decisions of the Commission and the Courts as its formal integration in the assessment of collective dominance cases would facilitate its interpretation and it would resolve any ambiguities in its articulation. Therefore, the only remaining significant limitation of the indirect test would be related to the fact that it exclusively applies to the strengthening of pre-existing collective dominance.

An alternative or cumulative solution that would facilitate the proof of coordinated effects and would result in increased enforcement relates to the evolution of econometric analysis or the revolution of economic theory, despite the recognised difficulties in the materialisation of such objectives. On the one hand, the tools used in the analysis of coordinated effects should be sharpened by the advancement of suitable econometric techniques in the assessment of tacit collusion in homogeneous markets and accordingly economists should attribute increased efforts towards this goal, since it would greatly facilitate the examination as well as the establishment of such a theory of harm. On the other

hand, the advancement of game theoretic models is of critical importance for the future evolution of the coordinated effects analysis, and in that regard such models need to evolve beyond case-specific results by aiming at more generalised findings, while they should also be reinforced by systematic empirical testing. In addition, the assessment of coordinated effects may be enriched by the gradual integration of tested insights from behavioural economics or by results drawn from experimental analysis. In any case, the future examination of coordinated effects is expected to be firmly grounded on the consistent use of economic principles and analysis and to that extent it is suggested that the Courts should leave to the Commission a wider degree of discretion to carry out its economic assessment, but at the same time they should maintain the appropriate checks and balances.

Another important aspect concerns the prospective relationship between the concept of collective dominance in mergers as opposed to the concepts of Article 102 collective dominance and Article 101 concerted practices as well as the relationship between coordinated and unilateral effects. On the one hand, the prospective relationship between the concepts of collective dominance under the Merger Regulation and collective dominance under Article 102 may evolve due to the potential application of the *Impala* test in an Article 102 context that could introduce a more flexible era and facilitate the enforcement against tacit collusion in such a context through the indirect fulfilment of the *Airtours* criteria and the capability to simultaneously establish the abuse element. On the other hand, no modification is expected to materialise in the prospective relationship between the concepts of concerted practices under Article 101 and collective dominance under the Merger Regulation on the issue of tacit collusion as the requirement of contact and the Courts' precedent on the evidential value of parallel behaviour coupled with an extremely high threshold of proof do not leave room for an effective enforcement against such conduct. Lastly, the way forward in

the relationship between unilateral and coordinated effects will be characterised by a clear cut distinction between these theories of harm which together they will continue to form the framework for the control of all anticompetitive mergers, whilst the degree of enforcement would vary and depend on the potential application of the *Impala* test and the development of econometric analysis or the progress of collusion theory.

Lastly, it is imperative that the Commission should direct its policy focus towards the inclusion of considerations relating to dynamic competition in coordinated effects cases. Thus, the assessment of the potential anticompetitive impact of concentrations should progressively move away from the strict consideration of price effects and involve an extended focus on the evaluation of adverse non-price effects, especially in view of the fact that coordination seems difficult but possible to occur in relation to innovation, whilst the Commission should also seed emphasis on the likelihood of parallel exclusion directed towards the blocking of innovation. Also, the policy goal of EU-US convergence on merger assessment is of central concern and to that extent it is expected that the theory of parallel accommodating conduct will be eventually included within the EU Merger Control framework but the question is how exactly this concept will be formulated in such a context.

Cases

Commission

- ABF/GBI* (Case COMP/M.4980 [2008])
- Adidas/Reebok* (Case COMP/M.3942 [2006])
- Aerospatiale-Alenia/De Havilland* (Case IV/M.53 [1991], OJ L334/42 [1991], 4 CMLR M2 [1992])
- Airtours/First Choice* (Case IV/M.1524 [1999], OJ L93/1 [2000], 5 CMLR 494 [2000])
- Alcoa/British Aluminium* (Case COMP/M.2111 [2000])
- Amer/Salomon* (Case COMP/M.3765 [2005])
- AT&T/NCR* (Case IV/M.50 [1991])
- Barilla/BPS/Kamps* (Case COMP/M.2817 [2002])
- Boeing/McDonnell Douglas* (Case IV/M.877 [1997], OJ L336/16 [1997], 5 CMLR 270 [1997])
- CEWAL* (Cases IV/32.448 and 32.450 [1992], OJ L34/20 [1993], 5 CMLR 198 [1995])
- Danish Crown/Vestjyske Slagterier* (Case IV/M.1313 [1999], OJ L20/1 [2000])
- DuPont/ICI* (Case IV/M.214 [1992], OJ L7/13 [1993])
- EDP/ENI/GDP* (Case COMP/M.3440 [2004], OJ L302/69 [2005])
- Enso/Stora* (Case M.1225 [1998], OJ L254/9 [1999])
- Exxon/Mobil* (Case IV/M.1383 [1999], OJ L103/1 [2004])
- French-West African Shipowners' Committee* (Case IV/32.450 [1992], OJ L134/1 [1992], 5 CMLR 446 [1993])
- GE/Instrumentarium* (Case COMP/M.3083 [2003], OJ L109/1 [2004])
- Gencor/Lonrho* (Case M.619 [1996], OJ L11/30 [1997], 4 CMLR 107 [1999])
- General Electric/Honeywell* (Case COMP/M.2220 [2001], OJ L48/01 [2004])
- Hutchison 3G Austria/Orange Austria* (Case COMP/M.6497 [2012])
- Kali and Salz* (Case IV/M.308 [1993], OJ L186/30 [1994], 4 CMLR 526 [1994])
- KNP/Bühmann-Tetterode/VRG* (Case COMP/M.291 [1993], OJ L217/35 [1993])
- Korsnäs/AssiDomän Cartonboard* (Case COMP/M.4057 [2006])
- Lagardere/Natexis/VUP* (Case COMP/M.2978 [2004], OJ L125/54 [2004])
- Nestle/Perrier* (Case IV/M.190 [1992], OJ L356/1 [1992], 4 CMLR M17 [1993])
- Oracle/PeopleSoft* (Case COMP/M.3216 [2004], OJ L218/6 [2005])

Bibliography

- Philips/Agilent Health Care Solutions* (Case COMP/M.2256 [2001])
- Philip Morris/Papastratos* (Case COMP/M.3191 [2003])
- Pilkington Technint/SIV* (Case IV/M.358 [1993], OJ L158/24 [1994])
- Pirelli/BICC* (Case COMP/M.1882 [2000], OJ L070/35 [2003])
- PriceWaterhouse/Coopers* (Case IV/M.1016 [1998], OJ L50/27 [1999])
- Procter & Gamble/Gillette* (Case COMP/M.3732 [2005])
- Rexam (PLM)/American National Can* (Case COMP/M.1939 [2000])
- SCA/Metsä Tissue* (Case COMP/M.2097 [2001], OJ L57/1 [2002])
- Siemens/Drägerwerk/JV* (Case COMP/M.2861 [2003], OJ L291/1 [2003])
- Sony/BMG* (Case COMP/M.3333 [2004])
- Syngenta CP/Advanta* (Case COMP/M.3465 [2004])
- TomTom/TeleAtlas* (Case COMP/M.4854 [2008])
- Transatlantic Conference Agreement (TACA I)* (Case IV/35.134 [1998], OJ L95/1 [1999], 4 CMLR 1415 [1999])
- Unilever/Sara Lee* (Case COMP/M.5658 [2010])
- UPM-Kymmene/Haindl* (Case COMP/M.2498 [2001])
- VNU/WPP/JV* (Case COMP/M.3512 [2004])
- Vodafone Airtouch/Mannesmann* (Case COMP/M.1795 [2000])
- Volvo/Renault* (Case IV/M.1980 [2000])
- Volvo/Scania* (Case IV/M.1672 [2000], OJ L143/74 [2001])

General Court

- Airtours v. Commission* (Case T-342/99 [2002], ECR II-2585 [2002], 5 CMLR 317 [2002])
- AstraZeneca v. Commission* (Case T-321/05 [2010], ECR II-2805 [2010])
- Atlantic Container Line AB And Others v. Commission* (TACA II) (Cases T-191 and 212-214/98 [2003], ECR II-3275 [2003], 5 CMLR 1283 [2005])
- Compagnie Maritime Belge v. Commission* (Cases T-24-26/93 and 28/93 [1996], ECR II-1201 [1996], 4 CMLR 273 [1997])
- Dresdner Bank v. Commission* (Case T-44/02 [2006], ECR II-03567 [2006])
- EDP v. Commission* (Case T-87/05 [2005], ECR II-3745 [2005])
- EFIM v. Commission* (Case T-296/09 [2011], ECR II-00425 [2011])
- Enichem Anic v. Commission* (Case T-6/89 [1991], ECR II-1623 [1991])
- France Telecom v. Commission* (Case T-340/03 [2007], ECR II-00107 [2007])
- Gencor v. Commission* (Case T-102/96 [1999], ECR II-753 [1999], 4 CMLR 971 [1999])

Bibliography

- Impala v. Commission* (Case T-464/04 [2006], ECR II-2289 [2006], 5 CMLR 19 [2006])
- Irish Sugar v. Commission* (Case T-228/97 [1999], ECR II-02969 [1999])
- JFE Engineering v. Commission* (Case T-67/00 [2004], ECR II-02501 [2004])
- Kingdom of Spain v. Commission* (Case T-398/07 [2012], ECR II-000 [2012])
- Laurent Piau v. Commission* (Case T-193/02 [2005], ECR II-209 [2005])
- Microsoft v. Commission* (Case T-201/04 [2007], ECR II-3601 [2007])
- RJB Mining Plc v. Commission* (Case T-156/98 [2001], ECR II-337 [2001])
- SA Hercules Chemicals v. Commission* (Case T-7/89 [1991], ECR II-1711 [1991], 4 CMLR 84 [1992])
- Schneider Electric SA v. Commission* (Case T-310/01 [2002], ECR II-4071 [2002], 4 CMLR 768 [2003])
- Societa Italiana Vetro v. Commission (Italian Flat Glass)* (Cases T-68, 77 and 78/89 [1992], ECR II-1403 [1992], 5 CMLR 302 [1992])
- Tetra Laval BV v. Commission* (Case T-5/02 [2002], ECR II-4381 [2002], 5 CMLR 1182 [2002])
- Tomra v. Commission* (Case T-155/06 [2010], ECR II-000 [2010])

Opinions

- Opinion Of Advocate General Darmon, *Ahlstrom Osaakeyhtio v. Commission (Woodpulp)* ([1992], ECR I-1307 [1993])
- Opinion Of Advocate General Fenelly, *Compagnie Maritime Belge v. Commission* ([1998], ECR I-1365 [2000])
- Opinion Of Advocate General Kokott, *Sony v. Impala* ([2007], ECR I-4951 [2008])
- Opinion Of Advocate General Tizzano, *Commission v. Tetra Laval* ([2004], ECR I-992 [2005])

European Court Of Justice

- Aalborg Portland v. Commission* (Case C-204/00 [2004], ECR I-00123 [2004])
- Ahlstrom Oy v. Commission (Woodpulp)* (Cases C-89, 104, 114, 116, 117 and 125-29/85 [1993], ECR I-1307 [1993], 4 CMLR 407 [1993])
- Almelo and Others v. Energiebedrijf Ijsselmij* (Case C-393/92 [1994], ECR I-1477 [1994])
- Commission v. Anic* (Case C-49/92P [1999], ECR I-4125 [1999])
- Commission v. Tetra Laval* (Case C-12/03P [2005], ECR I-987 [2005])

Bibliography

- Compagnie Maritime Belge v. Commission* (Cases C-395 and 396/96P [2000], ECR I-1365 [2000], 4 CMLR 1076 [2000])
- Coöperatieve Vereniging v. Commission (Suiker Unie)* (Cases C-40-48, 50, 54-56, 111, 113 and 114/73 [1975], ECR 1663 [1975], 1 CMLR 295 [1976])
- France v. Commission (Kali and Salz)* (Cases C-68/94 and 30/95 [1998], ECR I-1375 [1998], 4 CMLR 829 [1998])
- Hoffmann La Roche* (Case C-85/76 [1979], ECR 461 [1979], 3 CMLR 211 [1979])
- Huls AG v. Commission* (Case C-199/92P [1999], ECR I-4287 [1999], 5 CMLR 1016 [1999])
- Imperial Chemical Industries v. Commission (Dyestuffs)* (Cases C-48, 49 and 51-57/69 [1972], ECR 619 [1972], CMLR 557 [1972])
- P. Montecatini v. Commission* (Case C-235/92 [1999], ECR I-4575 [1999])
- Post Danmark A/S v. Konkurrenceradet* (Case C-209/10 [2012], ECR I-0000 [2012])
- Sony v. Impala* (Case C-413/06 [2008], ECR I-4951 [2008])
- T-Mobile v. Raad Van Vestuur Van De Nederlandse Mededingingsautoriteit (Mobile Operators)* (Case C-8/08 [2009], ECR I-4529 [2009])
- United Brands* (Case C-27/76 [1978], ECR 207 [1978], 1 CMLR 429 [1978])
- Zuchner v. Bayerische Vereinsbank* (Case C-172/80 [1981], ECR 2021 [1981], 1 CMLR 313 [1982])

Legislation

Commission Notice On Remedies Acceptable Under Council Regulation (EC) No 139/2004, 2008, ([2008], OJ C267/1 [2008]) available at http://ec.europa.eu/competition/mergers/legislation/files_remedies/remedies_notice_en.pdf

Commission Notice On The Definition Of The Relevant Market For The Purposes Of Community Competition Law ([1997], OJ C372/5 [1998], 4 CMLR 177 [1998], available at [http://eur-](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31997Y1209(01):EN:HTML)

[lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31997Y1209\(01\):EN:HTML](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31997Y1209(01):EN:HTML))

Communication From The Commission - Guidance On The Commission's Enforcement Priorities In Applying Article 82 Of The EC Treaty To Abusive Exclusionary Conduct By Dominant Undertakings ([2009], OJ C45/7 [2009], available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:045:0007:0020:EN:PDF>)

Consolidated Version Of The Treaty On The Functioning Of The European Union ([2010], OJ C/83/47 [2010], available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:083:0047:0200:en:PDF>)

Council Regulation (EC) No. 139/2004 Of 20 January 2004 On The Control Of Concentrations Between Undertakings ([2004], OJ L24/1 [2004], available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32004R0139:EN:HTML>)

Council Regulation (EEC) No. 4064/89 Of 21 December 1989 On The Control Of Concentrations Between Undertakings ([1989], OJ L395/1 [1989], available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31989R4064:EN:HTML>)

Guidelines On The Assessment Of Horizontal Mergers Under The Council Regulation On The Control Of Concentrations Between Undertakings ([2004], OJ C31/5 [2004], available at [http://eur-](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52004XC0205(02):EN:HTML)

[lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52004XC0205\(02\):EN:HTML](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52004XC0205(02):EN:HTML))

Guidelines On The Assessment Of Non-Horizontal Mergers Under The Council Regulation On The Control Of Concentrations Between Undertakings ([2007], OJ C265/6 [2008], available at [http://eur-](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:265:0006:0025:en:PDF)

[lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:265:0006:0025:en:PDF](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:265:0006:0025:en:PDF))

U.S. Department Of Justice And The Federal Trade Commission, Horizontal Merger Guidelines ([1992], available at <http://www.ftc.gov/bc/docs/horizmer.shtm>)

Bibliography

U.S. Department Of Justice And The Federal Trade Commission, Horizontal Merger Guidelines ([2010], available at <http://www.ftc.gov/os/2010/08/100819hmg.pdf>)

Regulation (EC) No 1/2003 On The Implementation Of The Rules On Competition Laid Down In Articles 81 And 82 Of The Treaty, 2002, available at <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32003R0001>

Books

- Bektashi F., *Collective Dominance In EC Competition Law: Role Of Structural Links - Case Law Analysis Under The EC Merger Regulation*, VDM Verlag, First Edition, 2008
- Davis S. and Lyons B., *Mergers And Merger Remedies In The EU – Assessing The Consequences For Competition*, Elgar, First Edition, 2007
- Gerber D., *Law And Competition In Twentieth Century Europe, Protecting Prometheus*, Oxford, First Edition, 1998
- Hildebrand D., *The Role of Economic Analysis In The EC Competition Rules*, Kluwer, Second Edition, 2002
- Lyons B., *Cases In European Competition Policy – The Economic Analysis*, Cambridge, First Edition, 2009
- Martin S., *Industrial Organization*, Oxford, First Edition, 2001
- Monti G., *EC Competition Law*, Cambridge, First Edition, 2007
- Murray A., *A Fair Referee? – The European Commission And EU Competition Policy*, Centre For European Reform, First Edition, 2004
- Oinonen M., *Does EU Merger Control Discriminate Against Small Market Companies?: Diagnosing The Argument With Conclusions*, Kluwer, First Edition, 2010
- Schwalbe U. and Zimmer D., *Law And Economics In European Merger Control*, Oxford, First Edition, 2009
- Stroux S., *US And EC Oligopoly Control*, Kluwer, First Edition, 2004
- Telser L., *Competition, Collusion And Game Theory*, Transaction Publishers, First Edition, 2007
- Voigt S. and Schmidt A., *Making European Merger Policy More Predictable*, Springer, First Edition, 2005

Reports

Communication From The Commission, A Pro-Active Competition Policy For A Competitive Europe, 2004, COM (2004) 293 Final, available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2004:0293:FIN:EN:PDF>, 1-20

DG Comp Annual Management Plan 2005, available at http://ec.europa.eu/competition/publications/annual_management_plan/amp_2005_en.pdf, 1-25

DG Competition Discussion Paper On The Application Of Article 82 Of The Treaty To Exclusionary Abuses, 2005, available at <http://ec.europa.eu/competition/antitrust/art82/discpaper2005.pdf>, 1-72

Europe Economics, Study On Assessment Criteria For Distinguishing Between Competitive And Dominant Oligopolies In Merger Control, Final Report For The European Commission Enterprise Directorate General, 2001, available at <http://www.cea.fi/course/material/EuropeEconomics.pdf>, 1-135

European Commission XXXIInd Report On Competition Policy 2002, available at http://ec.europa.eu/competition/publications/annual_report/2002/en.pdf, 1-310

European Commission XXXIIIrd Report On Competition Policy 2003, available at http://ec.europa.eu/competition/publications/annual_report/2003/en.pdf, 1-315

European Commission Report On Competition Policy 2004, Vol. 1, available at http://ec.europa.eu/competition/publications/annual_report/2004/en.pdf, 1-202

European Commission Report On Competition Policy 2005, available at http://ec.europa.eu/competition/publications/annual_report/2005/en.pdf, 1-210

European Commission Report On Competition Policy 2006, available at http://ec.europa.eu/competition/publications/annual_report/2006/en.pdf, 1-35

ICN Report On Merger Guidelines, Coordinated Effects Analysis Under International Merger Regimes, 2004, available at <http://www.internationalcompetitionnetwork.org/uploads/library/doc560.pdf>, 1-25

Ivaldi M., Jullien B., Rey P., Seabright P. and Tirole J., The Economics Of Horizontal Mergers: Unilateral And Coordinated Effects, 2003, available at http://www.een.sk/docs/KD7105150ENS_002.pdf, 1-163

Bibliography

Ivaldi M., Jullien B., Rey P., Seabright P., and Tirole J., The Economics Of Tacit Collusion, Final Report For DG Competition, 2003, available at http://ec.europa.eu/competition/mergers/studies_reports/the_economics_of_tacit_collusion_en.pdf, 1-75

Ivaldi M., Jullien B., Rey P., Seabright P. and Tirole J., The Economics Of Unilateral Effects, Interim Report For DG Competition, 2003, available at http://idei.fr/doc/wp/2003/economics_unilaterals.pdf, 1-105

Merger Remedies Study, 2005, available at http://ec.europa.eu/competition/mergers/legislation/remedies_study.pdf

OECD Country Studies, European Commission – Peer Review Of Competition Law And Policy – Competition Law And Policy In The EU, 2005, available at <http://www.oecd.org/dataoecd/7/41/35908641.pdf>, 1-82

Articles

A

Abbink K. and Brandts J., Collusion In Growing And Shrinking Markets: Empirical Evidence From Experimental Duopolies, 2005, available at <http://www.nottingham.ac.uk/cedex/documents/papers/2005-03.pdf>, 1-20

Ahlborn C., Competition Policy In The New Economy - Is European Competition Law Up To The Challenge?, E.C.L.R., 2001, 22(5), 156-167

Ahlborn C. and Grave C., Walter Eucken And Ordoliberalism: An Introduction From A Consumer Welfare Perspective, C.P.I., 2006, 2(2), 197-217

Ahlborn C. and Ysewyn J., EC Merger Control Regulation – Problems And Solution – The EC: Is The Turkey Really Voting For Christmas?, Comp. Law, 2002, 301-309

Aigner G., Budzinski O. and Christiansen A., The Analysis Of Coordinated Effects In EU Merger Control: Where Do We Stand After *Sony/BMG* And *Impala*?, E.C.J., 2006, 2(2), 311-336, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=933548, 1-28

Albaek S., Møllgaard P. and Overgaard P., Transparency And Coordinated Effects In European Merger Control, 2010, available at http://www.cresse.info/uploadfiles/2010_S4.5_Paper.pdf, 1-7

Alese F., Foreclosing The Gap: The Commission's Non-Horizontal Merger Guidelines – A 'Response' To Simon Bishop, E.C.L.R., 2008, 29(3), 196-200

Alese F., Legislative Comment - The Economic Theory Of Non-Collusive Oligopoly And The Concept Of Concerted Practices Under Article 81, E.C.L.R., 1999, 20(7), 379-383

Alfter M., Bishop S. and Mahr E., New Horizontal Merger Guidelines, Plugging The Gap Or Opening The Floodgates?, Business Law International, 2004, 5(3), 385-399

Allan B., Article 82 - A Commentary On DG Competition's Discussion Paper, C.P.I., 2006, 2(1), 43-82

Amelio A., Asbo P., De La Mano M., Maximiano R. and Porubsky V., *ABF/GBI* Business: Coordinated Effects Baked Again, Competition Policy Newsletter, 2009, available at http://ec.europa.eu/competition/publications/cpn/2009_1_22.pdf, 91-96

Ardıyok Ş., Comparative Analysis Of Collective Dominance, 2006, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1162187, 1-39

Bibliography

Arnaudo L., The Quest For Behavioral Antitrust: Beyond The Label Battle, Towards A Cognitive Approach, 2013, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1962515, 1-25

Averitt N. and Lande R., Consumer Sovereignty, A Unified Theory Of Antitrust And Consumer Protection Law, *Antitrust L.J.*, 1997, 65, 713-756

B

Baccaro V., Failing Firm Defence And Lack Of Causality: Doctrine And Practice In Europe Of Two Closely Related Concepts, *E.C.L.R.*, 2004, 25(1), 11-24

Bacon K., State Regulation Of The Market And EC Competition Rules: Articles 85 And 86 Compared, *E.C.L.R.*, 1997, 18(5), 283-291

Bagwell K. and Wolinsky A., Game Theory And Industrial Organization, 2000, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=239431, 1-41

Bailey D., Standard Of Proof In EC Merger Proceedings: A Common Law Perspective, *C.M.L.R.*, 2003, 40, 845-888

Baker and McKenzie Client Alert, New EC Merger Regulation To Take Effect On 1 May 2004, 2004, available at <http://www.bakernet.com/NR/rdonlyres/8159EBBC-45D8-482C-942B-C7991454454C/36970/NewECMRCClientAlertFebruary2004.pdf> (last visited 11/08/2011), 1-4

Baker J., A Preface To Post-Chicago Antitrust, 2001, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=296119, 1-24

Baker J., Exclusion As A Core Competition Concern, 2012, available at <http://www7.luc.edu/media/lucedu/law/centers/antitrust/pdfs/events/baker.pdf>, 1-73

Baker J., Market Concentration In The Antitrust Analysis Of Horizontal Mergers, 2010, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1092248, 1-27

Baker J., Why Did The Antitrust Agencies Embrace Unilateral Effects?, *George Mason Law Review*, 2003-2004, 12, 31-37

Baker J. and Shapiro C., Reinvigorating Horizontal Merger Enforcement, 2007, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=991588, 1-44

Banks D., Non-Competition Factors And Their Future Relevance Under European Merger Law, *E.C.L.R.*, 1997, 18(3), 182-186

Bannerman E., The Future Of EU Competition Policy, 2002, available at http://www.cer.org.uk/sites/default/files/publications/attachments/pdf/2011/p297_competition_policy-1926.pdf, 1-60

Bibliography

- Baranes E., Mirabel F. and Poudou J., Collusion Sustainability With Multimarket Contacts: Revisiting HHI Tests, 2009, available at <http://ideas.repec.org/p/lam/wpaper/09-05.html>, 1-15
- Basedow J., The Modernization Of European Competition Law: A Story Of Unfinished Concepts, Texas International Law Journal, 2006-2007, 42, 429-439
- Baxter S. and Dethmers F., Collective Dominance Under EC Merger Control - After *Airtours* And The Introduction Of Unilateral Effects Is There Still A Future For Collective Dominance?, E.C.L.R., 2006, 27(3), 148-160
- Baxter S. and Dethmers F., Unilateral Effects Under The European Merger Regulation: How Big Is The Gap?, E.C.L.R., 2005, 26(7), 380-389
- Besen S., Kletter S., Moresi S., Salop S. and Woodbury J., An Economic Analysis Of The *AT&T-T-Mobile* USA Wireless Merger, Journal Of Competition Law And Economics, 2013, 9(1), 23-47
- Biro Z. and Parker D., A New EC Merger Test? Dominance v. Substantial Lessening Of Competition, Comp. Law, 2002, 1, 157-166
- Bishop S., Case Comment - Power And Responsibility: The ECJ's *Kali-Salz* Judgment, E.C.L.R., 1999, 20(1), 37-39
- Bishop S., Lofaro A. and Rosati F., Turning The Tables: Why Vertical And Conglomerate Mergers Are Different, E.C.L.R., 2006, 27(7), 403-406
- Bishop S. and Marsden P., The Article 82 Discussion Paper: A Missed Opportunity, E.C.J., 2006, 2(1), 1-7
- Bishop S. and Ridyard D., Prometheus Unbound: Increasing The Scope For Intervention In EC Merger Control, E.C.L.R., 2003, 24(8), 357-363
- Black O., Collusion And Coordination In EC Merger Control, E.C.L.R., 2003, 24(8), 408-411
- Black O., Concerted Practices, Joint Action And Reliance, E.C.L.R., 2003, 24(5), 219-228
- Blair R. and Herndon J., Inferring Collusion From Economic Evidence, Antitrust, 2001, 15, 17-21
- Boege U., Speech At The ICN First Annual Conference, 2002, available at <http://www.internationalcompetitionnetwork.org/uploads/library/doc584.pdf>, 1-6
- Boge U. and Muller E., From The Market Dominance Test To The SLC Test: Are There Any Reasons For A Change?, E.C.L.R., 2002, 23(10), 495-498
- Botteman Y., Mergers, Standard Of Proof And Expert Economic Evidence, J.C.L.&E., 2006, 2(1), 71-100
- Botteman Y. and Ewing K., Guidance On Enforcement Priorities Regarding Exclusionary Abuses: A Comparative Overview, G.C.P., 2009, February, 1-15

Bibliography

- Brandenburger R. and Janssens T., The *Impala* Judgment: Does EC Merger Control Need To Be Fixed Or Fine-Tuned?, C.P.I., 2007, 3(1), 301-310
- Briones J., A Balance Of The Impact Of Economic Analysis On The EU Competition Policy, World Competition, 2009, 32(1), 27-39
- Briones J., Economic Assessment Of Oligopolies Under The Community Merger Control Regulation, E.C.L.R., 1993, 14(3), 118-122
- Briones J., Oligopolistic Dominance: Is There A Common Approach In Different Jurisdictions? A Review Of Decisions Adopted By The Commission Under The Merger Regulation, E.C.L.R., 1995, 16(6), 334-347
- Briones J. and Padilla A., The Complex Landscape Of Oligopolies Under EU Competition Policy – Is Collective Dominance Ripe For Guidelines?, World Competition, 2001, 24(3), 307-318
- Brozen Y., The Concentration-Collusion Doctrine, Antitrust L.J., 1977, 46, 826-863
- Budzinski O., Monoculture Versus Diversity In Competition Economics, Cambridge J.Econ., 2008, 32, 295-324
- Budzinski O. and Christiansen A., Simulating The Unilateral Effects Of Mergers: Implications Of The *Oracle/Peoplesoft* Case, 2006, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=924375, 1-34
- Budzinski O. and Christiansen A., The *Oracle/PeopleSoft* Case: Unilateral Effects, Simulation Models And Econometrics In Contemporary Merger Control, 2007, available at http://www.uni-marburg.de/fb02/makro/forschung/gelbereihe/artikel/2007-02_budzinski-christiansen.pdf, 1-34
- Burnside A. and Brooks G., EC Merger Reform – Substantive Issues In The Draft Notice On Horizontal Mergers: Paramount Confusion?, C.L.I., 2003, February, 3-5
- Burrows E., Review Of Merger Decisions By The CAT: A Question Of Evidence, Comp. Law, 2006, 5(3), 169-183
- Burtis M., Modern Industrial Organisation: A Comment, Geo. Mason L. Rev., 2003-2004, 12, 39-46

C

- Cabral L., Collusion Theory: Where To Go Next?, J.I.C.T., 2005, 5:3/4, 199-206
- Caffarra C. and Ysewyn J., Case Comment - Two's Company, Three's A Crowd: The Future Of Collective Dominance After The *Kali & Salz* Judgment, E.C.L.R., 1998, 19(7), 468-472

Bibliography

- Carson Y., Judicial Interference: Redefining The Role Of The Judiciary Within The Context Of US And EU Merger Clearance Coordination, *Vanderbilt Journal Of Transnational Law*, 2007, 40, 1543-1577
- Christiansen A., The 'More Economic Approach' In EU Merger Control – A Critical Assessment, 2006, available at http://www.dbresearch.com/PROD/DBR_INTERNET_DE-PROD/PROD0000000000196093.PDF, 1-26
- Christiansen A., The Reform Of EU Merger Control – Fundamental Reversal Or Mere Refinement?, 2006, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=898845, 1-60
- Church J., The Church Report's Analysis Of Vertical And Conglomerate Mergers: A Reply To Cooper, Froeb, O'Brien And Vita, *J.C.L.&E.*, 2005, 1(4), 797-802
- Coate M., Alive And Kicking: Collusion Theories In Merger Analysis At The Federal Trade Commission, *C.P.I.*, 2008, 4(2), 145-174
- Coate M., Economic Models In Merger Analysis: A Case Study Of The Merger Guidelines, 2005, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=726515, 1-44
- Coate M and Fischer J., Daubert, Science And Modern Game Theory, Implications For Merger Analysis, 2009, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1268386, 1-68
- Colley L., From 'Defence' To 'Attack'? Quantifying Efficiency Arguments In Mergers, *E.C.L.R.*, 2004, 25(6), 342-349
- Competition Law Forum Article 82 Review Group, The Reform Of Article 82: Comments On The DG-Competition Discussion Paper On The Application Of Article 82 To Exclusionary Abuses, *E.C.J.*, 2006, 2(1), 169-178
- Cooper J., Froeb L., O'Brien D. and Tschantz S., Does Price Discrimination Intensify Competition? - Implications For Antitrust, *Antitrust L.J.*, 2005, 72, 327-373
- Cooper R. and Ross T., Sustaining Cooperation With Joint Ventures, *Journal Of Law, Economics And Organization*, 2009, 25(1), 31-54
- Covington and Burling LLP, U.S. Antitrust Agencies Issue Revised Horizontal Merger Guidelines, 2010, available at <http://www.cov.com/files/Publication/c9851377-6281-4815-9695-061adad98ce9/Presentation/PublicationAttachment/2e7bffd0-eb90-44cf-87fe-0f2ddbc13a67/U.S.%20Antitrust%20Agencies%20Issue%20Revised%20Horizontal%20Merger%20Guidelines.pdf>, 1-5
- Cseres K., The Controversies Of The Consumer Welfare Standard, *The Competition Law Review*, 2007, 3(2), 121-173

D

Damme E. and Pinkse J., Merger Simulation Analysis: An Academic Perspective, 2005, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=869737, 1-14

Davies J., Schlossberg R., Jaspers M. and Scholomiti K., Efficiencies – A Changing Horizon In Horizontal Merger Control, 2007, available at http://www.gettingthedealthrough.com/narrative_pdf.php?id=11 (last visited 04/12/2010), 3-13

Davies S. and Olczak M., Tacit Collusion, Firm Asymmetries And Numbers: Evidence From EC Merger Cases, 2007, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=982531, 1-33

Davies S. and Olczak M., Tacit Versus Overt Collusion Firm Asymmetries And Numbers: What's The Evidence?, C.P.I., 2008, 4(2), 175-200

Davis M., The Value Of Truth And The Optimal Standard Of Proof In Legal Disputes, J.L.Econ.&Org., 1994, 10, 343-359

Davis P., Coordinated Effects Merger Simulation With Linear Demands, 2006, available at http://www.competition-commission.org.uk/our_role/analysis/coordinated_effects_merger_sim.pdf, 1-22

Davis R., Innovation Markets And Merger Enforcement: Current Practice In Perspective, Antitrust L.J., 2003, 71(2), 677-703

Demougin D. and Fluet C., Deterrence v. Judicial Error: A Comparative View Of Standards Of Proof, 2004, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=585770, 1-14

Denis P., Market Power In Antitrust Merger Analysis: Refining The Collusion Hypothesis, Antitrust L.J., 1991-1992, 80, 829-838

Denzel U., The US 'Significant Lessening Of Competition' Merger Enforcement Standard And The EU 'Dominant Position' Test – A Comparison, Seminar Advanced Antitrust Judge Richard Posner, 2002, available at <http://home.uchicago.edu/~rposner/denzel2.htm>, 1-25

Depoortere F. and Motta G., The Doctrine Of Collective Dominance: All Together Forever?, G.C.P., 2009, October, 1-8

Doerr C., The Problem Of Collusion: How Best To Resolve It?, Auckland University Law Review, 2000-2003, 9, 104-126

Dubow B., D. Elliott and E. Morrison, Unilateral Effects And Merger Simulation Models, E.C.L.R., 2004, 25(2), 114-117

Dufwenberg M and Gneezy U., Price Competition And Market Concentration: An Experimental Study, *International Journal Of Industrial Organisation*, 2000, 18, 7-22

E

Egge M., Bay M. and Calzado J., The New EC Merger Regulation: A Move To Convergence, *Antitrust*, 2004, Fall, 37-42

Egge M., Bay M. and Calzado J., The New EC Merger Regulation: Recipe For Profound Change Or More Of The Same?, IBA 8th Annual Competition Conference, 2004, available at http://www.lw.com/upload/pubContent/_pdf/pub1063_1.pdf, 1-30

Eibl S. and Schultze J., From Freiburg To Brussels And Back Again? The Seventh Revision Of Germany's Competition Law, *E.C.L.R.*, 2005, 26(9), 526-531

Elliott G., Case Comment - The *Gencor* Judgment: Collective Dominance, Remedies And Extraterritoriality Under The Merger Regulation, *E.L.Rev.*, 1999, 24(6), 638-652

Engel C., Competition As A Socially Desirable Dilemma – Theory v. Experimental Evidence, *Preprints Of The Max Planck Institute For Research On Collective Goods*, 2009, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1444270, 1-24

Engel C., How Much Collusion? A Meta-Analysis Of Oligopoly Experiments, *J.C.L.&E.*, 2007, 3(4), 491-549

Engel C., Tacit Collusion - The Neglected Experimental Evidence, 2007, available at http://www.coll.mpg.de/pdf_dat/2007_14online.pdf, 1-15

Enrique F. and Diaz G., The Reform Of European Merger Control: Quid Novi Sub Sole?, *World Competition*, 2004, 27(2), 177-199

Erdem H., Critic Of Turkish Competition Law In The Light Of EU Merger Regulation, 2006, available at <http://oldweb.yeditepe.edu.tr/7tepe/egitim/lisans/hukuk/UNCTAD/tebligler/ercumenterdem-article.doc>, 1-18

Ersboll N., Commitments Under The Merger Regulation, *E.C.L.R.*, 2001, 22(9), 357-364

Etro F. and Kokkoris I., An Economic Approach To Abuse Of Dominance, 2010, available at <http://dipeco.economia.unimib.it/repec/pdf/mibwpaper190.pdf>, 1-47

Etter B., The Assessment Of Mergers In The EC Under The Concept Of Collective Dominance – An Analysis Of The Recent Decisions And Judgments By An Economic Approach, *World Competition*, 2000, 23(3), 103-139

Bibliography

EU Committee Of The American Chamber Of Commerce In Belgium, Response To The Green Paper On The Review Of The Merger Regulation (Council Regulation No. 4064/89), 2002, available at <http://www.amchameu.eu/> (last visited 17/02/2009), 1-14

European Round Table Of Industrialists - Competition Policy Task Force, Response To The 'Green Paper On The Review Of Council Regulation (EEC) No 4064/89', 2001, available at http://www.ec.europa.eu/competition/consultations/2002_council_regulation/ert.pdf, 1-4

Evans D., How Economists Can Help Courts Design Competition Rules - An EU And US Perspective, *World Competition*, 2005, 28(1), 93-99

Evans D. and Grave C., The Changing Role Of Economics In Competition Policy Decisions By The European Commission During The Monti Years, *C.P.I.*, 2005, 1(1), 133-154

Ezrachi A., Behavioural Remedies In EC Merger Control – Scope And Limitations, *World Competition*, 2006, 29(3), 459-479

Ezrielev J. and Ordovery J., The 2010 Horizontal Merger Guidelines: A Static Compass In A DynamicWorld?, 2010, available at http://www.americanbar.org/content/dam/aba/publishing/antitrust_source/Oct10_Ezrielev10_21.authcheckdam.pdf, 1-6

F

Farrell J. and Shapiro C., Antitrust Evaluation Of Horizontal Mergers: An Economic Alternative To Market Definition, *The B.E. Journal Of Theoretical Economics*, 2010, available at <http://faculty.haas.berkeley.edu/shapiro/alternative.pdf>, 1-39

Feaster T. and Treacy P., Case Comment - *Compagnie Maritime Belge Transports SA v. Commission Of The European Communities*, *E.C.L.R.*, 1997, 18(7), 467-472

Felice A., EU Merger Policy: The Substantive Test, 2007, available at <http://www.albertodifelice.com/essays/mergers.php>, 1-5

Fernandez B., Hashi I. and Jegers M., The Implementation Of The European Commission's Merger Regulation 2004: An Empirical Analysis, *J.C.L.&E.*, 2008, 4(3), 791-809

Fernandez P., Case Comment, Increasing Powers And Increasing Uncertainty: Collective Dominance And Pricing Abuses, *E.L.Rev.*, 2000, 25(6), 645-653

Feuersten S., Collusion In Industrial Economics - A Survey, *J.I.C.T.*, 2005, 5:3/4, 163-198

Fisher F., Games Economists Play: A Noncooperative View, *Rand Journal Of Economics*, 1989, 20(1), 113-124

- Fountoukakos K., Case Note: *Impala v. Commission (Sony/BMG)*, E-Sapience Center For Competition Policy, 2006, available at http://econpapers.repec.org/article/cpiatchrn/11.1.2006_3ai=5030.htm, 1-20
- Fountoukakos K. and Ryan S., A New Substantive Test For EU Merger Control, E.C.L.R., 2005, 26(5), 277-296
- Fournier E., The Elusive Standard Of Proof In EU Competition Cases, World Competition, 2010, 33(2), 187-207
- Fox E., We Protect Competition, You Protect Competitors, World Competition, 2003, 26(2), 149–165
- Franzosi M., Oligopoly And The Prisoner's Dilemma: Concerted Practices And 'As If' Behaviour, E.C.L.R., 1988, 9(4), 385-389
- Freshfields Bruckhaus Deringer, New EC Merger Regime: A Director's Overview, 2004, available at <http://www.freshfields.com/publications/pdfs/practices/8289.pdf> (last visited 13/01/2009), 1-2
- Friederiszick H. and Maier-Rigaud F., Triggering Inspections Ex Officio: Moving Beyond A Passive EU Cartel Policy, J.C.L.&E., 2008, 4(1) 89-113

G

- Gallice A., The Neglected Effects Of Demand Characteristics On The Sustainability Of Collusion, International Centre For Economics Research Working Paper Series, 2008, available at <http://econpapers.repec.org/paper/cprceprdp/6975.htm>, 1-15
- Galloway J., The Pursuit Of National Champions: The Intersection Of Competition Law And Industrial Policy, E.C.L.R., 2007, 28(3), 172-186
- Gayle W., Marshall R., Marx L. and Richard J., Coordinated Effects In The 2010 Horizontal Merger Guidelines, 2010, available at <http://people.virginia.edu/~wg4b/MergerDraft7.pdf>, 1-20
- Geradin D., Oligopoly Control After *Laurent Piau* And *Tetra Laval* – Shifting Paradigm Or Just The Same Old Song?, 2005, available at http://professorgeradin.blogs.com/professor_geradins_weblog/2005/03/oligopoly_contr.html, (last visited 21/06/2011), 1-2
- Geradin D. and Petit N., Judicial Review In European Union Competition Law: A Quantitative And Qualitative Assessment, 2010, available at http://orbi.ulg.ac.be/bitstream/2268/143359/1/GERADIN_PETIT_Judicial%20Review.pdf, 1-39

Bibliography

- Geradin D., Hoferm P., Louis F., Petit N. and Walker M., The Concept Of Dominance In EC Competition Law, Global Competition Law Centre - Research Paper On The Modernization Of Article 82 EC, 2005, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=770144, 1-31
- Gerber D., Modernising European Competition Law: A Developmental Perspective, E.C.L.R., 2001, 22(4), 122-130
- Gerven G. and Varona E., The *Wood Pulp* Case And The Future Of Concerted Practices, C.M.L.R., 1994, 31, 575-608
- Gilbert R. and Rubinfeld D., Revising the Horizontal Merger Guidelines: Lessons From The US And The EU, available at <http://www.law.berkeley.edu/faculty/rubinfeldd/Profile/publications/Merger%20Guidelines%20China%208%2012%2010.pdf>, 1-21
- Gilbert R. and Sunshine S., Incorporating Dynamic Efficiency Concerns In Merger Analysis: The Use Of Innovation Markets, Antitrust L.J. 1994-1995, 63, 569-601
- Gordon C. and Richardson R., Collective Dominance: The Third Way?, E.C.L.R., 2001, 22(10), 416-423
- Gormsen L., The Parallels Between The Harvard Structural School And Article 82 EC And The Divergences Between The Chicago And Post-Chicago Schools And Article 82, E.C.J., 2008, 4(1), 221-241
- Grillo M., Collusion And Facilitating Practices: A New Perspective In Antitrust Analysis, E.J.L.E., 2002, 14(2), 151-169
- Grunes A. and Stucke M., Antitrust Review Of The *AT&T/T-Mobile* Transaction, Federal Communications Law Journal, 2011-2012, 64, 47-85
- Gual J., Time To Rethink Merger Policy?, C.P.I., 2007, 1(3), 29-44
- Gual J., Hellwig M., Perrot A., Polo M., Rey P., Schmidt K. and Stenbacka R., An Economic Approach To Article 82, Report By The EAGCP, 2005, available at http://ec.europa.eu/dgs/competition/economist/eagcp_july_21_05.pdf, 1-53
- Gutu I. and Bernitz U., The Effect Of EU Merger Policy On Large Multinationals Based In Sweden And Other Smaller EU Member States: Is The Policy Discriminatory?, E.C.L.R., 2003, 24(1), 19-29

H

- Hancher L., *Gemeente Almelo And Others v. Energiebedrijf*, C.M.L.R., 1995, 32, 305-325

Bibliography

- Haracoglou I., Competition Law, Consumer Policy And The Retail Sector: The Systems' Relation And The Effects Of A Strengthened Consumer Protection Policy On Competition Law, *The Competition Law Review*, 2007, 3(2), 175-208
- Harrington J., Evaluating Mergers For Coordinated Effects And The Role Of 'Parallel Accommodating Conduct', 2012, available at http://krieger2.jhu.edu/economics/wp-content/uploads/pdf/papers/wp601_harrington.pdf, 1-17
- Harrington J. and Skrzypacz A., Collusion Under Monitoring Of Sales, *Rand Journal Of Economics*, 2007, 38(2), 314-331
- Harris C., European Merger Review - Tightening Control While Expanding Third Party Power, *North Carolina Journal Of International Law And Commercial Regulation*, 2007-2008, 33, 337-357
- Haupt H., Collective Dominance Under Article 82 E.C. And E.C. Merger Control In The Light Of The *Airtours* Judgment, *E.C.L.R.*, 2002, 23(9), 434-444
- Hawk B. and Motta G., Oligopolies And Collective Dominance: A Solution In Search Of A Problem, *Fordham University School Of Law*, 2008, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1301693, 59-104
- Hawkes L., The EC Merger Control Regulation: Not An Industrial Policy Instrument: The *De Havilland* Decision, *E.C.L.R.*, 1992, 13(1), 34-38
- Hays T., Anticompetitive Agreements And Extra-Market Parallel Importation, *E.L.Rev.*, 2001, 26(5), 468-488
- Heimler A., Was The Change Of The Test For Merger Control In Europe Justified? An Assessment (Four Years After the Introduction Of SIEC), *E.C.J.*, 2008, 4(1), 85-94
- Hellstrom P., A Uniform Standard Of Proof In EU Competition Proceedings, 2009, available at <http://www.eui.eu/Documents/RSCAS/Research/Competition/2009/2009-COMPETITION-Hellstrom.pdf>, 1-9
- Hellstrom P., Maier-Rigaud F. and Bulst F., Remedies In European Antitrust Law, *Antitrust Law Journal*, 76, 2009, 43-63
- Hemphill S. and Wu T., Parallel Exclusion, *Yale Law Journal*, 2013, available at http://awards.concurrences.com/IMG/pdf/parallel_exclusion_yale_law_journal.pdf, 1182-1253
- Heyer K., Welfare Standard And Merger Analysis: Why Not the Best?, *C.P.I.*, 2006, 2(2), 29-54
- Heyer K. and Kimmel S., Merger Review Of Firms In Financial Distress, *G.C.P.*, 2009, 5(2), 103-118

Bibliography

- Hildebrand D., CCR, UPP, GUPPI And IPR – Merger Screening Tools, 2013, available at http://www.ee-mc.com/uploads/media/CCR_Spring_20130306.pdf, 1-6
- Hildebrand D., The European School In EC Competition Law, *World Competition*, 2002, 25(1), 3–23
- Hinds A., The New EC Merger Regulation – The More Things Change The More They Stay The Same?, *E.B.L.R.*, 2006, 17(6), 1693-1713
- Hirsbrunner S. and Kockritz C., Rebalancing EC Merger Control: The ECJ's Judgment In Case C-413/06 (*Bertelsmann And Sony*), *G.C.P.*, 2008, July, 1-20
- Holmes S. and Humpe C., A Pyrrhic Victory For Both Sides?, *C.L.I.*, 2006, January, 9-11
- Holt C., Equilibrium Models Of Tacit Collusion In Oligopoly Experiments With Price-Setting Firms, Center For Economic Research - University Of Minnesota, Discussion Paper No. 80, 1980, 1-26
- Hornsby S., Can Enhanced Merger Control Solve The Oligopoly Problem?, *C.L.I.*, 2004, February, 17-20
- Hovenkamp H., Harm To Competition Under The 2010 Horizontal Merger Guidelines, 2011, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1702843, 1-17
- Huck S., Normann H. and Oechssler J., Two Are Few And Four Are Many: Number Effects In Experimental Duopolies, *Journal Of Economic Behaviour And Organization*, 2004, 53, 435-446
- Hughes M. and Wirth D., The Assessment Of Non-Horizontal Mergers Under EC and UK Merger Control, 2010, available at <http://www.iclg.co.uk/khadmin/Publications/pdf/2427.pdf> (last visited 24/02/2011), 1-9
- Huschelrath K., Detection Of Anticompetitive Horizontal Mergers, *J.C.L.&E.*, 2009, 5(4), 683-721

I

- Iacobucci E. and Winter R., Abuse Of Joint Dominance In Canadian Competition Policy, *University Of Toronto Law Journal*, 2010, available at http://www.law.utoronto.ca/utfl_file/count/documents/iacobucci/Iacobucci%20-%20Abuse%20-%20UTLJ.pdf, 219-237
- ICC, Comments On Draft EC Guidelines On The Assessment Of Non-Horizontal Mergers Under The Council Regulation On The Control Of Undertakings Between Undertakings, 2005, available at

Bibliography

http://ec.europa.eu/competition/mergers/legislation/files_non_horizontal_consultation/icc.pdf, 1-13

ICC, Comments On European Commission Draft Notice On The Appraisal Of Horizontal Mergers, 2003, available at <http://www.iccwbo.org/Advocacy-Codes-and-Rules/Document-centre/2003/Comments-on-European-Commission-Draft-Notice-on-the-Appraisal-of-Horizontal-Mergers/>, 1-11

ICN Merger Working Group, Project On Merger Guidelines, Report For The Third ICN Annual Conference In Seoul, 2004, available at <http://www.internationalcompetitionnetwork.org/uploads/library/doc488.pdf>, 1-19

Immenga U., Merger Control In Europe And Germany: Recent Developments, Competition Policy And Economic Development, 2002, available at http://law.wustl.edu/wugslr/issues/volume3_2/p441Immenga.pdf, 441-453

J

James C., Rediscovering Coordinated Effects, Paper Presented At The American Bar Association Annual Meeting, 2002, available at <http://www.usdoj.gov/atr/public/speeches/200124.pdf>, 1-12

Jenny F., Collective Dominance And The EC Merger Regulation, In: *Annual Proceedings Of The Fordham Corporate Law Institute - International Antitrust Law And Policy 2001*, Edited By B. Hawk, 2002, 361-373

Jephcott M. and Withers C., Where To Go Now For E.C. Oligopoly Control?, *E.C.L.R.*, 2001, 22(8), 295-303

Jones A., Case Comment - *Woodpulp*: Concerted Practice And/Or Conscious Parallelism?, *E.C.L.R.*, 1993, 14(6), 273-279

K

Kaplow L., On The Choice Of Welfare Standards In Competition Law, 2011, available at http://www.law.harvard.edu/programs/olin_center/papers/pdf/Kaplow_693.pdf, 1-19

Kaseberg T., *Bertelsmann AG And Sony Corporation Of America v. Independent Music Publishers And Labels Association (Impala)*, *C.M.L.R.*, 2009, 46, 255-267

Katsoulacos Y., Some Critical Comments On The Commission's Guidance Paper On Article 82 EC, *G.C.P.*, 2009, February, 1-11

Katsoulacos Y. and Ulph D., On Optimal Legal Standards For Competition Policy: A General Welfare-Based Analysis, *J.Ind.Econ.*, 2009, 57(3), 410-437

Bibliography

- Kattan J. and Vigdor W., Game Theory And The Analysis Of Collusion In Conspiracy And Merger Cases, *George Mason Law Review*, 1996-1997, 5(3), 441-456
- Katz M. and Shelanski H., Mergers And Innovation, *Antitrust L.J.*, 2007, 74, 1-85
- Këllezi P. and Rapin C., Merger Remedies And Competition Law: An Overview Of EU And National Case Law, 2012, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2014636, 1-12
- Kilpatrick Stockton LLP, Antitrust Legal Alert - The New Test Adopted For European Union Merger Review, 2003, available at http://www.martindale.com/members/Article_Atachment.aspx?od=305497&id=50966&filename=asr-50968.pdf, 1-2
- Klees A., From '*Airtours*' To '*Impala*' – Collective Dominance Under European Merger Control, *Panoptica Journal*, 2007, June, 351-367
- Kloosterhuis E., Joint Dominance And The Interaction Between Firms, *E.C.L.R.*, 2001, 22(3), 79-92
- Kobayashi B., Game Theory And Antitrust: A Post-Mortem, *Geo. Mason L. Rev.*, 1996-1997, 5, 411-421
- Kobayashi B. and Muris T., Chicago, Post-Chicago And Beyond: Time To Let Go Of The 20th Century, 2012, available at http://www.law.gmu.edu/assets/files/publications/working_papers/1231ChicagoPostChicago.pdf, 1-28
- Kokkoris I., Assessment Of Efficiencies In Horizontal Mergers: The OFT Is Setting The Example, *E.C.L.R.*, 2009, 30(12), 581-592
- Kokkoris I., Assessment Of Mergers Inducing Coordinated Effects In The Presence Of Explicit Collusion, *World Competition*, 2008, 31(4), 499-522
- Kokkoris I., Buyer Power Assessment In Competition Law: A Boon Or A Menace?, *World Competition*, 2006, 29(1), 139-164
- Kokkoris I., Critical Loss Analysis: Critically Ill, *E.C.L.R.*, 2005, 26(9), 518-525
- Kokkoris I., Do Merger Simulation And Critical Loss Analysis Differ Under The SLC And Dominance Test?, *E.C.L.R.*, 2006, 27(5), 249-260
- Kokkoris I., The Development Of The Concept Of Collective Dominance In The ECMR – From Its Inception To Its Current Status, *World Competition*, 2007, 30(3), 419-448
- Kokkoris I., The Reform Of The European Control Merger Regulation In The Aftermath Of The *Airtours* Case - The Eagerly Expected Debate: SLC v. Dominance Test, *E.C.L.R.*, 2005, 26(1), 37-47

Bibliography

- Korah V., *Gencor v. Commission*: Collective Dominance, E.C.L.R., 1999, 20(6), 337-341
- Kovacic W. and Shapiro C., Antitrust Policy: A Century Of Economic And Legal Thinking, Journal Of Economic Perspectives, 2000, 14(1), available at <http://faculty.haas.berkeley.edu/shapiro/century.pdf>, 43-60
- Kovacic W., Marshall R., Marx L. and Schulenberg S., Coordinated Effects In Merger Review: Quantifying The Payoffs From Collusion, available at <https://faculty.fuqua.duke.edu/~marx/bio/papers/FordhamChapter%2013.pdf>, 271-285
- Kovacic W., Marshall R., Marx L. and Schulenberg S., Quantitative Analysis Of Coordinated Effects, 2009, available at <https://faculty.fuqua.duke.edu/~marx/bio/papers/KovacicMarshallMarxSchulenbergALJ2009.pdf>, 397-430
- Kroes N., European Competition Policy: Delivering Better Markets And Better Choices, Presentation At European Consumer And Competition Day, 2005, available at <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/05/512&format=HTML&aged=0&language=EN&guiLanguage=en>, 1-6
- Kuhn K., Closing Pandora's Box? Joint Dominance After The *Airtours* Judgment, 2002, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=349521, 1-20
- Kuhn K., Collusion Theory In Search Of Robust Themes: A Comment On Switgard Feuerstein's Survey, J.I.C.T., 2005, 5(3), 207-215
- Kuhn K., The Coordinated Effects Of Mergers, In: *Handbook Of Antitrust Economics*, Edited by Paolo Buccirossi, MIT Press, First Edition, 2008, 105-144
- Kuhn K. and Caffara C., Joint Dominance: The CFI Judgment On *Gencor/Lonrho*, E.C.L.R., 1999, 20(7), 355-359
- Kuhnert H., Widening The Gap – The Impact Of The *T-Mobile/tele.ring* Decision, C.L.I., 2007, January, 9-10

L

- Lande R., Consumer Choice As The Ultimate Goal Of Antitrust, University Of Pittsburgh Law Review, 2001, 62(3), 503-525
- Lang J., Oligopolies And Joint Dominance In Community Antitrust Law, In: *Annual Proceedings Of The Fordham Corporate Law Institute - International Antitrust Law And Policy 2001*, Edited By B. Hawk, 2002, 269-359
- Langer J., The *Airtours* Judgment: A Welcome Lecture On Oligopolies, Economics And Joint Dominance, C.J.E.L., 2003, 10, 105-117

Bibliography

- Langevoort D., *The Behavioral Economics Of Mergers And Acquisitions*, 2010, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1692777, 2-21
- Leaman W., *Its Not Always Nice To Play Nice: Collusion, Competition And Development*, *Pacific McGeorge Global Business And Development Law Journal*, 2007, 20, 289-316
- Lear Competition Note, *Merger Screen And The Use Of Price Pressure Tests*, 2013, available at http://www.learlab.com/pdf/lcn_merger_screen_price_pressure_test_1360694100.pdf, 1-10
- Lianos I., *Collusion In Vertical Relations Under Article 81 EC*, *C.M.L.R.*, 2008, 45, 1027-1077
- Lianos I., *Competition Law Remedies In Europe – Which Limits For Remedial Discretion?*, *CLES Research Paper Series*, 2013, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2235817, 1-83
- Lianos I., *Some Reflections On The Question Of The Goals Of EU Competition Law*, *CLES Working Paper Series 3/2013*, 2013, available at <http://www.ucl.ac.uk/cles/research-paper-series/research-papers/cles-3-2013#>, 1-64
- Lind R. and Muysert P., *Innovation And Competition Policy: Challenges For The New Millennium*, *E.C.L.R.*, 2003, 24(2), 87-92
- Litzell M., *The Appraisal Of Collective Dominance Under The Clarified Substantive Test Of The New EC Merger Regulation - A Step Towards Greater Global Convergence Of Merger Control?*, 2005, available at http://www.elsa.org/fileadmin/user_upload/elsa_international/PDF/SPEL/SPEL05_1_MARIA_LITZELL.pdf, 32-56
- Llorens A., *Case Comment - Collective Dominance: A Mechanism For The Control Of Oligopolistic Markets?*, *Cambridge Law Journal*, 2000, 59(2), 253-257
- Lofaro A., *When Imperfect Collusion Is Profitable*, *Journal Of Economics*, 1999, 70(3), 235-259
- Louis F., *New EU Commission Notice On Remedies In Merger Cases*, 2008, available at <http://www.wilmerhale.com/pages/publicationsandnewsdetail.aspx?NewsPubId=92920>, 1-7
- Louveaux B. and Gilbert P., *The Standard Of Proof Under The Competition Act*, *E.C.L.R.*, 2005, 26(3), 173-177
- Lowe P., *Competition Policy And The Global Economic Crisis*, *C.P.I.*, 2009, 5(2), 3-24
- Lowe P., *Preserving And Promoting Competition: A European Response*, *Competition Policy Newsletter*, 2006, available at http://ec.europa.eu/competition/publications/cpn/2006_2_1.pdf, 1-5
- Lowe P., *The Future Of EU Merger Control*, *Comp. Law*, 2002, 310-317

Bibliography

Lowe P., The Future Shape Of European Merger Control, Speech At The RBB/FIPRA Seminar, 2003, available at http://ec.europa.eu/competition/speeches/text/sp2003_045_en.pdf, 1-10

Lowe P., The Substantive Standard For Merger Control And The Treatment Of Efficiencies In Merger Analysis: An EU Perspective, Fordham Annual Antitrust Conference, 2002, available at http://ec.europa.eu/competition/speeches/text/sp2002_039_en.pdf, 1-13

M

Maier-Rigaud F. and Parplies K., EU Merger Control Five Years After The Introduction Of The SIEC Test: What Explains The Drop In Enforcement Activity?, E.C.L.R., 2009, 30(11), 565-579

Maier-Rigaud F., Wiesen D. and Parplies K., Experimental Economics And Competition Policy: Unilateral And Coordinated Effects In Competition Games, E.C.L.R., 2008, 29(7), 408-417

Maille P., Naldi M. and Tuffin B., Understanding And Preventing Tacit Collusion Among Telecommunication Operators, 2009, available at <http://hal.archives-ouvertes.fr/docs/00/44/70/30/PDF/maille2009understanding.pdf>, 249-263

Marsden P. and Whelan P., 'Consumer Detriment' And Its Application In EC And UK Competition Law, E.C.L.R., 2006, 27(10), 569-585

Matto E., The 2010 Horizontal Merger Guidelines: How The Guidelines Will Change The FTC/DOJ Analysis Of U.S. Mergers, 2011, available at <http://www.terralext.org/publication/3d5a6959f9>, 1-6

Maudhuit S. and Soames T., Changes In EU Merger Control: Part 2, E.C.L.R., 2005, 26(2), 75-82

McDermott, Will and Emery, New Draft Guidelines Facilitate Acquisitions In Europe, 2007, available at http://www.mwe.com/index.cfm/fuseaction/publications.nldetail/object_id/cf3e47d2-a74f-4e17-adf9-f3db354a78c7.cfm, 1-3

McGowan L., Reinforcing Europeanization: Assessing The Significance And Impact Of The Recast Merger Control Regulation, Queen's Papers On Europeanization 03/07, 2007, available at <http://www.qub.ac.uk/schools/SchoolofPoliticsInternationalStudiesandPhilosophy/FileStore/EuropeanisationFiles/Filetoupload,87349,en.pdf>, 1-19

- McGregor L., The Future For The Control Of Oligopolies Following *Compagnie Maritime Belge*, E.C.L.R., 2001, 22(10), 434-442
- Megregian S. and Garrod D., EU And US Merger Control: Transatlantic Convergence Rolls On, *Comp. Law*, 2005, 4(2), 124-157
- Mehta K., Comments On Switgard Feurstein's 'Collusion In Industrial Economics – A Survey', *J.I.C.T.*, 2005, 5:3/4, 217-222
- Melicias M., 'Did They Do It? The Interplay Between The Standard Of Proof And The Presumption Of Innocence In EU Cartel Investigations', *World Competition*, 35(3), 2012, 471-510
- Mertens P., How Consistently Has The Issue Of Collective Dominance Been Developed Under Article 82 And The EC Merger Regulation Respectively?, 2001, available at <http://www.grin.com/en/e-book/104011/how-consistently-has-the-issue-of-collective-dominance-been-developed-under>, 1-15
- Mezzanotte F., Can The Commission Use Article 82 EC To Combat Tacit Collusion?, CCP Working Paper 09-5, 2009, available at http://www.uea.ac.uk/polopoly_fs/1.111282!ccp09-5.pdf, 1-36
- Mezzanotte F., Direct Versus Indirect Proof Of The *Airtours* Criterion In *Impala*, *World Competition*, 2008, 31(4), 523-540
- Mezzanotte F., Tacit Collusion As Economic Links In Article 82 EC Revisited, E.C.L.R., 2009, 30(3), 137-142
- Mezzanotte F., Using Abuse Of Collective Dominance In Article 102 TFEU To Fight Tacit Collusion: The Problem Of Proof And Inferential Collusion, *World Competition*, 2010, 33(1), 77-102
- Mills R. and Weinstein R., Unilateral Effects Of Mergers: The Simulation Approach, 1999, available at http://www.micronomics.com/articles/Merger_Paper.pdf, 1-18
- Miyagiwa K., Collusion And Research Joint Ventures, *J.Ind.Econ.*, 2009, 57(4), 768-784
- Montero J. and Guzman J., Output-Expanding Collusion In The Presence Of A Competitive Fringe, *J.Ind.Econ.*, 2010, 58(1), 106-126
- Monti G., The Concept Of Dominance In Article 82, E.C.J., 2006, Supplement, 31-52
- Monti G., The New Substantive Test In The EC Merger Regulation – Bridging The Gap Between Economics And Law?, LSE Law, Society And Economy Working Papers, 2008, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1153661, 1-21
- Monti G., The Scope Of Collective Dominance Under Article 82 EC, C.M.L.R., 2001, 38, 131-157

Bibliography

- Monti M., Convergence In EU-US Antitrust Policy Regarding Mergers And Acquisitions: An EU Perspective, 2004, available at <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/04/107&format=HTML&aged=1&language=EN&guiLanguage=en>, 1-4
- Monti M., EU Competition Policy After May 2004, Fordham Annual Conference On International Antitrust Law And Policy, 2003, available at <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/03/489&format=HTML&aged=1&language=EN&guiLanguage=en>, 1-14
- Monti M., Merger Control In The European Union: A Radical Reform, 2002, available at <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/02/545&format=HTML&aged=0&language=EN&guiLanguage=en>, 1-11
- Monti M., Review Of The EC Merger Regulation – Roadmap For The Reform Project, Conference On Reform Of European Merger Control, 2002, available at <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/02/252&format=HTML&aged=1&language=EN&guiLanguage=en>, 1-10
- Moresi S., The Use Of Upward Price Pressure Indices In Merger Analysis, 2010, available at <http://www.crai.com/uploadedFiles/Publications/the-use-of-UPPIs-in-merger-analysis.pdf>, 1-12
- Moresi S., Reitman D., Salop S. and Sarafidis Y., Gauging Parallel Accommodating Conduct Concerns With The CPPI, 2011, available at [http://crai.co.uk/uploadedFiles/Publications/Gauging_Parallel_Accommodating_Conduct_Concerns_with_the_CPPI\(2\).pdf](http://crai.co.uk/uploadedFiles/Publications/Gauging_Parallel_Accommodating_Conduct_Concerns_with_the_CPPI(2).pdf), 1-40
- Moresi S. and Salop S., Incentive Scoring In Merger Review, 2013, available at <https://www.aeaweb.org/aea/2014conference/program/retrieve.php?pdfid=990>, 1-32
- Morgan E., Steering Mergers Through The EU's Regulatory Rocks: Remedies Under The EU Merger Control Regulation, *European Management Journal*, 2002, 20(5), 549-561
- Motis J., Mergers And Acquisition Motives, 2007, available at <http://economics.soc.uoc.gr/wpa/docs/paper2mottis.pdf>, 1-30
- Motta M., E.C. Merger Policy And The *Airtours* Case, *E.C.L.R.*, 2000, 21(4), 199-207
- Motta M., Polo M. and Vasconcelos H., Merger Remedies In The EU: An Overview, 2002, available at http://www.cerna.ensmp.fr/Documents/cerna_regulation/ColloqueMetR/Motta.pdf, 1-24

Bibliography

Muris T., The Interface Of Competition And Consumer Protection, Fordham Corporate Law Institute's Twenty-Ninth Annual Conference On International Antitrust Law And Policy, 2002, available at <http://www.ftc.gov/speeches/muris/021031fordham.pdf>, 1-30

N

Nazzini R., The Wood Began To Move: An Essay On Consumer Welfare, Evidence And Burden Of Proof In Article 82 Cases, E.L.Rev., 2006, 31(4), 518-539

Nedergaard P., The Influence Of Ordoliberalism In European Integration Processes, 2013, available at mpra.ub.uni-muenchen.de/52331/1/MPRA_paper_52331.pdf, 1-32

Neven D., First Impressions On The Revised US And UK Merger Guidelines, GRC Conference, 2010, available at http://ec.europa.eu/dgs/competition/economist/dn_conference_september_2010.pdf, 1-16

Neven D. and De La Mano M., Economics At DG Competition 2008-2009, 2009, available at http://ec.europa.eu/dgs/competition/economist/econ2008_2009.pdf, 317-347

Niels G., Collective Dominance: More Than Just Oligopolistic Interdependence, E.C.L.R., 2001, 22(5), 168-172

Niemeyer H., Drauz G., Jenny F. and Lang J., Collective Dominance/Oligopoly Behaviour Under Articles 81/82 And The EC Merger Regulation, In: *Annual Proceedings Of The Fordham Corporate Law Institute - International Antitrust Law And Policy 2001*, Edited By B. Hawk, 2002, 375-391

Nikpay A. and Houwen F., Case Comment - Tour De Force Or A Little Local Turbulence? A Heretical View On The *Airtours* Judgment, E.C.L.R., 2003, 24(5), 193-202

No Cited Author, Analysing Differentiated Product Mergers: The Relevance Of Structural Analysis, Harvard Law Review, 1997-1998, 111, 2420-2437

No Cited Author, *BMG/Sony* Merger Reversal Highlights Burden Of Proof, 2008, available at http://www.lw.com/upload/pubContent/_pdf/pub2266_1.pdf, 1-6

No Cited Author, Case Comment - Cartels, E.L.Rev., 1990, Supplement, 2-6

No Cited Author, Case Comment - *Compagnie Maritime Belge Transports SA v. Commission Of The European Communities*, E.L.Rev., 1997, 22 Supp., CC42-54

No Cited Author, Case Comment - Horizontal Agreements: Judgments Of The Court Of First Instance And The Court Of Justice, E.L.Rev., 1991, Supplement, 4-9

No Cited Author, Case Comment - *Woodpulp*, E.L.Rev., 1993, Supplement, 12-22

No Cited Author, Council First Pass At Draft Revision Of The Merger Regulation, C.L.I., 2003, June, 22-23

No Cited Author, *Schneider And Tetra* Judgments - Court Strikes Down Two European Merger Prohibitions, C.L.I., 2002, November, 9-10
Nourry A. and McNulty S., EC Merger Reform – From One-Stop Shop To All Over The Shop?, C.L.I., 2003, February, 5-8
Nucara A., *Schneider/Legrand And Tetra Laval/Sidel*, Fast Track Towards Merger Reform?, E.B.L.R., 2003, 14(2), 193-200

O

O'Donoghue R. and Feddersen C., *Airtours Plc. v. Commission*, C.M.L.R., 2002, 39, 1171-1185
Odudu O., Case Comment - Collective Dominance Clarified?, Cambridge Law Journal, 2004, 63(1), 44-46
Oldale A. and Padilla J., Economist's Note EU Merger Assessment Of Upward Pricing Pressure: Making Sense Of UPP, GUPPI, And The Like, Journal Of European Competition Law And Practice, 2013, 4(4), 375-381
O'Melveny and Myers LLP, U.S. Antitrust Agencies Issue Revised Horizontal Merger Guidelines, 2010, available at <http://omm.com/us-antitrust-agencies-issue-revised-horizontal-merger-guidelines-08-20-2010/>, 1-3
Onuma A., To What Extent Is The Concept Of Collective Dominance Applicable Under The ECMR?, 2005, available at http://www.dundee.ac.uk/cepmlp/car/html/car8_article10.pdf, 1-25
Orbach B., How Antitrust Lost Its Goal, Fordham Law Review, 2013, 81, available at <http://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=4883&context=flr>, 2253-2277
Ordoover J., Thinking About Coordinated Effects, 2012, available at http://www.concurrences.com/spip.php?action=acceder_document&arg=15590&cle=d63e5bcd1cacd556e19c4941456e4930345028b3&file=pdf%2F_concurrences_3-2012_editorial_ordover.pdf, 1-2
Ormosi P., Determinants Of The Success Of Remedy Offers: Evidence From European Community Mergers, CCP Working Paper 09-11, 2009, available at http://www.uea.ac.uk/polopoly_fs/1.138543!ccp09-11.pdf, 1-43
Osti C., Case Comment - Information Exchanges In The Obscure Light Of *Woodpulp*, E.C.L.R., 1994, 15(3), 176-182
Overd A., After The *Airtours* Appeal, E.C.L.R., 2002, 23(8), 375-377

Bibliography

Oxera Economics Council, Unilateral Effects Analysis And Market Definition: Substitutes In Merger Cases?, 2011, available at http://www.oxera.com/Oxera/media/Oxera/downloads/Agenda/Unilateral-versus-market-definition_1.pdf?ext=.pdf , 1-4

P

Paas K., Non-Structural Remedies In EU Merger Control, E.C.L.R., 2006, 27(5), 209-216, p. 209

Padilla A., Efficiencies In Horizontal Mergers: Williamson Revisited, 2005, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=812989, 1-41

Page W., The Ideological Origins And Evolution Of US Antitrust Law, Issues In Competition Law And Policy, 2009, 1, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=692821, 1-17

Page W. and Woodbury J., Paper Trail: Working Papers And Recent Scholarship, 2011, available at [http://www.crai.com/uploadedFiles/Publications/oct11_papertrail_10_24_woodbury\(1\).pdf](http://www.crai.com/uploadedFiles/Publications/oct11_papertrail_10_24_woodbury(1).pdf), 1-8

Papaioannou A., Diez U., Ryan S. and Sjoblom D., Green Paper On The Review Of The Merger Regulation, Competition Policy Newsletter, 2002, Vol. 1, 65-68

Papandropoulos P. and Tajana A., The Merger Remedies Study – In Divestiture We Trust?, E.C.L.R., 2006, 27(8), 443-454

Papon S., Structural v. Behavioural Remedies In Merger Control: A Case To Case Analysis, E.C.L.R., 2009, 30(1), 36-48

Parker D., A Screening Device For Tacit Collusion Concerns, E.C.L.R., 2006, 27(8), 424-433

Paulis E., The Burden Of Proof In Article 82 Cases, Fordham Conference, 2006, available at http://ec.europa.eu/competition/speeches/text/sp2006_014_en.pdf, 1-9

Pera A. and Auricchio V., Consumer Welfare, Standard Of Proof And The Objectives Of Competition Policy, E.C.J., 2005, 1(1), 1-30

Petit N., Remedies For Coordinated Effects Under The European Union Merger Regulation, 2010, available http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1639906, 1-15

Petit N., The ‘Oligopoly Problem’ In EU Competition Law, 2012, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1999829, 1-78

Petit N. and Henry D., Why The EU Merger Regulation Should Not Enjoy A Monopoly Over Tacit Collusion – A Close Look At Five Common Misconceptions, In: *Changes In*

Bibliography

Competition Policy Over The Last Two Decades, 2010, available at <http://www.uokik.gov.pl/download.php?plik=8562>, 181-197

Petrasincu A., The European Commission's New Guidelines On The Assessment Of Non-Horizontal Mergers - Great Expectations Disappointed, E.C.L.R., 2008, 29(4), 221-228

Petriccione R. and Leone V., Recent Developments Concerning Exchange Of Information, E.L.Rev., 1988, 13(3), 196-201

Pflanz M., *Oracle/PeopleSoft: The Economics Of EC Review*, E.C.L.R., 2005, 26(3), 123-127

Pierce R., Is Post-Chicago Economics Ready For The Courtroom?, A Response To Professor Brennan, The George Washington Law Review, 2000-2001, 1103-1125

Pilsbury S., The *Impala* Decision: An Economic Critique, E.C.J., 2007, 3(1), 31-47

Pittman R., Consumer Surplus As The Appropriate Standard For Antitrust Enforcement, C.P.I., 2007, 3(2), 205-224

Polverino F., Assessment Of Coordinated Effects In Merger Control - Between Presumption And Analysis, 2006, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=901688, 1-41

Pope D., Case Comment - Some Reflections On *Italian Flat Glass*, E.C.L.R., 1993, 14(4), 172-175

Porter R., Collusion In Industrial Economics: A Comment, J.I.C.T., 2005, 5:3/4, 231-234

Porter R., Detecting Collusion, Review Of Industrial Organization, 2005, 26, 147-167

Preece S., Case Comment - *Compagnie Maritime Belge*: Missing The Boat?, E.C.L.R., 2000, 21(8), 388-393

Prete L. and Nucara A., Standard Of Proof And Scope Of Judicial Review In EC Merger Cases: Everything Clear After *Tetra Laval*?, E.C.L.R., 2005, 26(12), 692-704

R

Rabassa V. and Christensen P., The *Airtours* Decision: Is There A New Commission Approach To Collective Dominance?, E.C.L.R., 2001, 22(6), 227-237

Ragolle F., Case Comment - *Schneider Electric v. Commission*: The GC's Response To The Green Paper On Merger Review, E.C.L.R., 2003, 24(4), 176-181

Reed E. and Higgins R., Economic Theories Of MFNs: Harms And Efficiencies, 2012, available at

https://www.healthlawyers.org/Members/PracticeGroups/Documents/Benefits/PGs_ExSumm_MFN_Clauses.pdf, 1-21

Bibliography

- Reed N. and Camesasca P., European Merger Control: Tougher, Softer, Clearer?, E.C.L.R., 2003, 24(9), 458-462
- Rees R., Tacit Collusion, Oxford Review Of Economic Policy, 1993, 9(2), 27-40
- Reeves A. and Stucke M., Behavioral Antitrust, Indiana Law Journal, 2011, available at http://ilj.law.indiana.edu/articles/86/86_4_reeves.pdf, 1527-1586
- Renckens A., Welfare Standards, Substantive Tests And Efficiency Considerations In Merger Policy: Defining The Efficiency Defence, J.C.L.&E., 2007, 3(2), 149-179
- Ridyard D., Economic Analysis Of Single Firm And Oligopolistic Dominance Under The European Merger Regulation, E.C.L.R., 1994, 15(5), 255-262
- Ridyard D., Joint Dominance And The Oligopoly Blind Spot Under The EC Merger Regulation, E.C.L.R., 1992, 13(4), 161-164
- Ridyard D., The Commission's New Horizontal Merger Guidelines - An Economic Commentary, 2005, available at <http://www.coleurope.eu/content/gclc/documents/GCLC%20WP%2002-05.pdf>, 1-13
- Ridyard D., Bishop S. and Baker S., Full Marks? The Draft EC Notice On The Appraisal of Horizontal Mergers, RBB Economics, 2003, available at http://www.rbbecon.com/publications/downloads/rbb_brief07.pdf, 1-4
- Riesenkampff A., The New EC Merger Control Test Under Article 2 Of The Merger Control Regulation, Northwestern Journal Of International Law And Business, 2003-2004, 24, 715-728
- Riley A., The EU Reform Treaty And The Competition Protocol - Undermining EC Competition Law, E.C.L.R., 2007, 28(12), 703-707
- Robert G. and Hudson C., Past Coordination And The Commission Notice On The Appraisal Of Horizontal Mergers Under The Council Regulation On The Control Of Concentrations Between Undertakings, E.C.L.R., 2004, 25(3), 163-168
- Rodger B., Oligopolistic Market Failure: Collective Dominance Versus Complex Monopoly, E.C.L.R., 1995, 16(1), 21-29
- Rodger B., The Oligopoly Problem And The Concept Of Collective Dominance: EC Developments In The Light Of U.S. Trends In Antitrust Law And Policy, C.J.E.L., 1995/1996, 2, 25-47
- Roller L., Economic Analysis And Competition Policy Enforcement In Europe, In: *Modelling European Mergers: Theory, Competition And Case Studies*, Elgar, First Edition, 2005, 13-26
- Roller L. and De La Mano M., The Impact Of The New Substantive Test In European Merger Control, E.C.J., 2006, 2(1), 9-28

Bibliography

Rompuy B., Case Comment - Implications For The Standard Of Proof In EC Merger Proceedings: *Bertelsmann And Sony Corporation Of America v. Impala*, E.C.L.R., 2008, 29(10), 608-612

Rompuy B. and Pauwels C., Is The Standard Of Proof Imposed By The Community Courts Undermining The Efficiency Of EC Merger Control? The *Sony/BMG* Joint Venture Case In Perspective, EUSA Tenth Biennial International Conference, 2007, available at <http://aei.pitt.edu/8013/1/rompuy-b-02g.pdf>, 1-33

Rompuy B. and Pauwels C., The European Commission's Re-Examination Of The *Sony/BMG* Merger: A Precedent-Setting Attempt To Jump The Fence, G.C.P., 2008, July, 1-31

Rosch T., Managing Irrationality: Some Observations On Behavioral Economics And The Creation Of The Consumer Financial Protection Agency, 2010, available at http://www.ftc.gov/sites/default/files/documents/public_statements/managing-irrationality-some-observations-behavioral-economics-and-creation-consumer-financial/100106financial-products.pdf, 1-16

Rousseva E. and Marquis M., Hell Freezes Over: A Climate Change For Assessing Exclusionary Conduct Under Article 102 TFEU, *Journal Of European Competition Law & Practice*, 2012, available at <http://jeclap.oxfordjournals.org/content/early/2012/10/25/jeclap.lps059.full.pdf>, 1-19

Rubli I., Case Comment - The Advocate-General's Opinion In *Wood Pulp*: Another Setback For The Commission's Competition Policy, E.C.L.R., 1993, 14(1), 26-28

Rybnicek J., 'Parallel Exclusion: Is It Time For A Theory Of Shared Monopoly?', 2013, available at http://www.mcmillan.ca/Files/159026_October%2018%20FINAL%20ABA%20Monopoly%20Matters%20-%20Fall%202013.pdf, 21-22

S

Scherer F., Some Principles For Post-Chicago Antitrust Analysis, *Case Western Reserve Law Review*, 2001-2002, 52, 5-23

Schinkel M., Forensic Economics In Competition Law Enforcement, *J.C.L.&E.*, 2008, 4(1), 1-30

Schmidt I., The Suitability Of The More Economic Approach For Competition Policy: Dynamic v. Static Efficiency, E.C.L.R., 2007, 28(7), 408-411

Bibliography

- Schmidt J., EC Merger Control – *Airtours*: Is There A Right To Merge?, C.L.I., December 2002/January 2003, 3-4
- Schodermeier M., Collective Dominance Revisited: An Analysis Of The EC Commission's New Concepts Of Oligopoly Control, E.C.L.R., 1990, 11(1), 28-34
- Scott A., 'An Immovable Feast?': Tacit Collusion And Collective Dominance In Merger Control After *Airtours*, CCR Working Paper CCR 02-6, 2006, available at http://www.uea.ac.uk/polopoly_fs/1.104458!ccr02-6.pdf, 1-21
- Selvam V., The EC Merger Control Impasse: Is There A Solution To This Predicament?, E.C.L.R., 2004, 25(1), 52-67
- Selvam V., The Substantive Test In EC Merger Control: How The Commission's Proposals Fills The Perceived Gaps, C.L.I., 2003, October, 19-21
- Shapiro C., Mergers With Differentiated Products, Antitrust, 1996, Spring, 23-29
- Shapiro C., Update From The Antitrust Division, 2010, available at <http://www.justice.gov/atr/public/speeches/264295.pdf>, 1-34
- Sidak G. and Teece D., Favoring Dynamic Competition, 2009, available at http://www.criterioneconomics.com/pdfs/Sidak-Teece_Favoring%20Dynamic%20Competition%20037.pdf, 1-55
- Simon K., Reaction To Prof. Donald C. Langevoort's 'The Behavioral Economics Of Mergers And Acquisitions', available at <http://users.wfu.edu/palmitar/Courses/M&A%20Law/Student%20Papers/Simon%20M&A%20Paper.doc>, 1-6
- Simpson and Thacher, The European Court Of First Instance Annuls The European Commission's Decision Approving The *Sony/BMG* Joint Venture, 2006, available at <http://www.simpsonthacher.com/content/publications/pub558.pdf>, 1-3
- Slade M., Market Power And Joint Dominance In UK Brewing, J.Ind.Econ., 2004, 52, 133-163
- Smith R. and King S., Does Competition Law Adequately Protect Consumers?, E.C.L.R., 2007, 28(7), 412-424
- Soames T., All Change: The New World After 1 May 2004, 2004, available at http://www.martindale.com/antitrust-trade-regulation-law/article_Howrey-LLP_71546.htm, 1-5
- Soames T., An Analysis Of The Principles Of Concerted Practice And Collective Dominance: A Distinction Without A Difference?, E.C.L.R., 1996, 17(1), 24-39

Bibliography

- Soares A., 'National Champions' Rhetoric In European Law Or The Many Faces Of Protectionism, *World Competition*, 2008, 31(3), 353-368
- Sørgard L., Merger Policy: Enforcement And Deterrence, 2009, available at <http://www3.interscience.wiley.com/cgi-bin/fulltext/122579678/PDFSTART>, 1-25
- Starek R. and Stockum S., What Makes Mergers Anticompetitive?: 'Unilateral Effects' Analysis Under The 1992 Merger Guidelines, *Antitrust L.J.*, 1994-1995, 63, 801-821
- Stenborg M., Forest For The Trees: Economics Of Joint Dominance, *E.J.L.E.*, 2004, 18, 365-385
- Stephanou S., Collective Dominance Through Tacit Coordination: The Case For Non-Coordination Between Article 82 And Merger Control 'Collective Dominance' Concepts, *G.C.P.*, 2009, October, 1-8
- Stevenson C. and Filippi I., How Does The European Commission's New Chief Economist Think?, *E.C.L.R.*, 2004, 25(2), 122-125
- Stigler G., A Theory Of Oligopoly, *The Journal Of Political Economy*, 1964, 72, available at http://cubbin.org.uk/comp_and_reg2009/week6/Stigler.pdf, 44-61
- Stirati G., The Appraisal Of Collective Dominance And Efficiency Gains Under The Substantive Test Of The New EU Merger Regulation, *Erasmus Law And Economic Review*, 2004, 1(3), available at <http://www.eler.org/include/getdoc.php?id=44&article=12&mode>, 249-286
- Stroux S., Case Comment – Collective Dominance Under The Merger Regulation: A Serious Evidentiary Reprimand For The Commission, *E.L.Rev.*, 2002, 27(6), 736-746
- Stroux S., *Compagnie Maritime Belge And Others v. Commission*, *C.M.L.R.*, 2000, 37, 1249-1264
- Stroux S., Economics Of Oligopoly: An Introduction For Lawyers, *EUI Working Paper Law*, No. 2002/6, 2002, available at <http://cadmus.eui.eu/dspace/bitstream/1814/184/1/law02-6.pdf>, 1-45
- Stroux S., Is EC Oligopoly Control Outgrowing Its Infancy?, *World Competition*, 2000, 23(1), 3-50
- Stucke M., Behavioral Economists At The Gate: Antitrust In The Twenty-First Century, 2007, available at <http://luc.edu/media/lucedu/law/students/publications/llj/pdfs/Stucke.Online.3.0.pdf>, 513-591
- Stucke M., New Antitrust Realism, 2009, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1323815, 1-22

Bibliography

Stucke M., The Implications Of Behavioural Antitrust, 2012, available at [http://search.oecd.org/officialdocuments/displaydocumentpdf/?cote=DAF/COMP/WD\(2012\)12&docLanguage=En](http://search.oecd.org/officialdocuments/displaydocumentpdf/?cote=DAF/COMP/WD(2012)12&docLanguage=En), 1-26

Suetens S. and Potters J., Bertrand Colludes More Than Cournot, *Experimental Economics*, 2007, 10, 71–77

Sullivan T., Antitrust Remedies In The U.S. And EU: Advancing A Standard Of Proportionality, *The Antitrust Bulletin*, 2003, Summer, 377-425

Swan A. and Murgatroyd R., Developments In Unilateral Effects Analysis: Price Pressure Tests, available at <http://www.compcom.co.za/assets/Uploads/events/Fifth-Annual-Conference/Murgatroyd-Swan-Developments-in-Unilateral-Effects-Analysis-Final.pdf>, 1-13

Symeonidis G., In Which Industries Is Collusion More Likely? Evidence From The UK, *J.Ind.Econ.*, 2003, 51, 45-74

T

Tajana A., Case Comment - EC Merger Control: Music Publishing, *E.C.L.R.*, 2006, 27(11), N194-195

Tepperman A. and Sanderson M., Innovation And Dynamic Efficiencies In Merger Review, available at <http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/02376.html>, 1-39

Theeuwes J., An Economic Analysis Of The New Regulation 139/2004, *Legal Issues Of Economic Integration*, 2005, 32(2), 209-217

Thompson R., Goodbye To ‘The Dominance Test’? Substantive Appraisal Under The New UK And EC Merger Regimes, *Comp. Law.*, 2003, 332-346

Tomczykiewicz K., Assessing The European Community’s Merger Regulations, 2007, available at <http://www.lepanoptique.com/sections/politique-economie/assessing-the-european-community%E2%80%99s-merger-regulations/>, 1-4

Torre F., Evidence, Proof And Judicial Review In Cartel Cases, *World Competition*, 2009, 32(4), 505-578

V

Varney C., The 2010 Horizontal Merger Guidelines: Evolution, Not Revolution, *Antitrust L.J.*, 2011, 77(2), 651-660

Vasconcelos H., Efficiency Gains And Structural Remedies In Merger Control, *J.Ind.Econ.*, 2010, 742-766

Bibliography

- Vatiero M., An Institutional Explanation Of Joint Dominance, *World Competition*, 2009, 32(2), 221-226
- Vecchi T., Unilateral Conduct In An Oligopoly According To The Discussion Paper On Article 82: Conscious Parallelism Or Abuse Of Collective Dominance?, *World Competition*, 2008, 31(3), 385-400
- Venit J., Two Steps Forward And No Steps Back: Economic Analysis And Oligopolistic Dominance After *Kali and Salz*, *C.M.L.R.*, 1998, 35, 1101-1134
- Vesterdorf B., Standard Of Proof In Merger Cases: Reflections In The Light Of Recent Case Law Of The Community Courts, *E.C.J.*, 2005, 1(1) 3-33
- Vickers J., Competition Economics And Policy, *E.C.L.R.*, 2003, 24(3), 95-102
- Vickers J., How To Reform The EC Merger Test?, A Speech At The EC/IBA Merger Control Conference, 2002, available at http://www.offt.gov.uk/shared_offt/speeches/spe0802.pdf, 1-4
- Vickers J., Merger Policy In Europe: Retrospect And Prospect, 2004, available at http://www.offt.gov.uk/shared_offt/speeches/spe0104.pdf, 1-15
- Vickers J., Merger Policy In Europe: Retrospect And Prospect, *E.C.L.R.*, 2004, 25(7), 455-463
- Vickers J., Opening Remarks At The European Competition And Consumer Day Conference, 2005, available at http://www.offt.gov.uk/shared_offt/speeches/sp0705.pdf, 1-5
- Vickers J., Strategic Competition Among The Few – Some Recent Developments In The Economics Of Industry, *Oxford Review Of Economic Policy*, 1985, 1(3), 39-62
- Vitzilaiou L. and Lambadarios C., The Slippery Slope Of Addressing Collective Dominance Under Article 82 EC, *C.P.I.*, 2009, October, 1-10
- Voigt S. and Schmidt A., Switching To Substantial Impediments Of Competition (SIC) Can Have Substantial Costs - SIC!, *E.C.L.R.*, 2004, 25(9), 584-590
- Voigt S. and Schmidt A., The Commission's Guidelines On Horizontal Mergers: Improvement Or Deterioration?, *C.M.L.R.*, 2004, 41, 1583-1594
- Volcker S., Mind The Gap: Unilateral Effects Analysis Arrives In EC Merger Control, *E.C.L.R.*, 2004, 25(7), 395-409
- Volcker S. and Charro P., *Tetra Laval* – A Landmark Judgment On EC Merger Control, *C.L.I.*, 2005, March, 3-5
- Volcker S. and O'Daly C., Case Comment - The Court Of First Instance's *Impala* Judgment: A Judicial Counter-Reformation In EU Merger Control?, *E.C.L.R.*, 2006, 27(11), 589-596

Bibliography

Volcker S., O'Daly C. and Israel A., European Court Of Justice Overturns GC's *Impala* Judgment And Restores Proper Process In EC Merger Review, 2008, available at <http://www.wilmerhale.com/publications/whPubsDetail.aspx?publication=8384>, 1-5

Vranas-Liveris E., *Impala v. Commission* - Changing The Tune Of European Competition Law, Chicago-Kent Law Review, 2008, 83, 1497-1521

W

Waelbroeck D. and Colomo P., *Laurent Piau* - Order Of The Court Of Justice, C.M.L.R., 2006, 43, 1743-1756

Walker M., Have The Economic Approaches To Merger Control In The EC And US Converged?, ICGL To Merger Control, 2005, available at http://www.crai.com/uploadedFiles/RELATING_MATERIALS/Publications/Consultant_publications/files/pub_4104.pdf, 20-24

Walker M., The New Merger Regulation And Horizontal Merger Guidelines: Will They Make A Difference?, available at http://www.crai.com/uploadedFiles/RELATING_MATERIALS/Publications/Consultant_publications/files/pub_4117.pdf, 1-4

Walker M. and Azevedo J., Dominance: Meaning And Measurement, E.C.L.R., 2002, 23(7), 363-367

Waller S., In Search Of Economic Justice: Considering Competition And Consumer Protection Law, Loyola University Chicago Law Journal, 2005, 36, 631-639

Waller S. and Woods J., Antitrust Transitions, World Competition, 2009, 32(2), 189-198

Walton M., The *Bertelsmann/Sony* Appeal – Advocate General Kokott's Opinion, C.L.I., 2008, February, 7-8

Wang W., Structural Remedies In EU Antitrust And Merger Control, World Competition, 2011, 34(4), 571-596

Wang W. and Rudanko M., EU Merger Remedies And Competition Concerns: An Empirical Assessment, European Law Journal, 2012, 18(4), 555-576

Weitbrecht A., EU Merger Control In 2001 - The Year Of Controversy, E.C.L.R., 2002, 23(8), 407-412

Weitbrecht A., EU Merger Control In 2004 - An Overview, E.C.L.R., 2005, 26(2), 67-74

Weitbrecht A., EU Merger Control In 2005 – An Overview, E.C.L.R., 2006, 27(2), 43-50

Weitbrecht A., EU Merger Control In 2006 - The Year In Review, E.C.L.R., 2007, 28(2), 125-133

Bibliography

- Weitbrecht A., From Freiburg To Chicago And Beyond - The First 50 Years Of European Competition Law, E.C.L.R., 2008, 29(2), 81-88
- Wellford H. and Wells G., The 'Litigation Mulligan' In The 2010 Merger Guidelines: Better Economics But Not (Necessarily) More Clarity Before The Agencies And The Courts, C.P.I., 2010, October, 1-11
- Went D., The Acceptability Of Remedies Under The EC Merger Regulation: Structural Versus Behavioural, E.C.L.R., 2006, 27(8), 455-475
- Werden G., Economic Evidence On The Existence Of Collusion: Reconciling Antitrust Law With Oligopoly Theory, Antitrust L.J., 2003-2004, 71, 719-800
- Werden G., Essays On Consumer Welfare And Competition Policy, 2009, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1352032, 1-30
- Werden G. and Froeb L., Choosing Among Tools For Assessing Unilateral Merger Effects, 2011, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1804243, 1-28
- Werden G. and Froeb L., The Effects Of Mergers In Differentiated Products Industries: Logit Demand And Merger Policy, J.L.Econ.&Org., 1994, 10(2), 407-426
- Werden G., Froeb L. and Shor M., Behavioral Antitrust And Merger Control, 2010, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1612282, 1-17
- Wezenbeek R., Consumers And Competition Policy, The Commission's Perspective And The Example Of Transport, E.B.L.R., 2006, 17(1), 73-82
- Whish R., Analytical Framework Of Merger Review - Substantial Lessening Of Competition/Creation Or Strengthening Of Competition, ICN First Annual Conference, 2002, available at <http://www.internationalcompetitionnetwork.org/uploads/library/doc565.pdf>, 1-4.
- White and Case, Draft Memorandum - Green Paper On Merger Reform, 2002, available at http://www.whitecase.com/files/Publication/2057337d-9436-4562-bdae-638e79912682/Presentation/PublicationAttachment/12fdd6bd-0507-4c10-9d6f-644e8899ab69/memo_competition_group.pdf, 1-10
- White L., Market Power: How Does It Arise? How Is It Measured?, 2012, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2056708, 1-50
- Willig R., Merger Analysis, Industrial Organization Theory And Merger Guidelines, In: *Microeconomics: Brookings Papers*, 1991
- Wilmer, Cutler and Pickering, European Commission Adopts Merger Control Reform Package, 2002, available at <http://www.wilmerhale.com/files/Publication/7178d077-068a-4bd2-9976-cb2dcf73db4d/Presentation/PublicationAttachment/bef3d442-7bcc-48a2-99a9-50a85b9c7490/ACFD854.pdf>, 1-6

Bibliography

- Wils W., The Combination Of The Investigative And Prosecutorial Function And The Adjudicative Function In EC Antitrust Enforcement: A Legal And Economic Analysis, *World Competition*, 2004, 27(2), 201-224
- Winckler A. and Hansen M., Collective Dominance Under The EC Merger Control Regulation, *C.M.L.R.*, 1993, 30, 787-828
- Wind E., Remedies And Sanctions In Article 82 Of The EC Treaty, *E.C.L.R.*, 2005, 26(12), 659-668
- Wise M., Competition Law And Policy In Finland, *OECD Journal Of Competition Law and Policy*, 2005, 6(4), available at http://www.keepeek.com/Digital-Asset-Management/oecd/governance/competition-law-and-policy-in-finland_clp-v6-art9-en, 1-67
- Wood D., The Standard And Burden Of Proof In Article 82 Cases, *C.L.I.*, 2008, March, 4-6
- Wright J., Overshot The Mark? A Simple Explanation Of The Chicago School's Influence On Antitrust, *C.P.I.*, 2009, 5(1), 1-34
- Wright J. and Stone J., Misbehavioural Economics: The Case Against Behavioural Antitrust, *Cardozo Law Review*, 2012, 33(4), 1517-1553
- Wright K., Case Comment - Perfect Symmetry? *Impala v. Commission* And Standard Of Proof In Mergers, *E.L.Rev.*, 2007, 32(3), 408-418

Y

- Yao D. and DeSanti S., Game Theory And The Legal Analysis Of Tacit Collusion, *The Antitrust Bulletin*, 1993, Spring, 113-141

Z

- Zekos G., The New E.U. Approach To Mergers And Market Integration, *E.C.L.R.*, 2000, 21(1), 37-44
- Zellmer J., Detecting Collusion In Oligopolistic Industries: A Comparison And Proposal, *Hastings International And Comparative Law Review*, 1982-1983, 829-855
- Zhu S., Converge? Diverge? A Comparison Of Horizontal Merger Laws In The United States And European Union, *World Competition*, 2006, 29(4), 635-651
- Zohios G., Commission Guidance Paper On The Application Of Article 82: A Step Towards Modernization Or A Step Away?, *G.C.P.*, 2009, February, 1-7
- Zutven A. and Urlus H., Greenberg Traurig LLP Client Alert - New EU Merger Regulation And Reform Of EC Antitrust Enforcement, 2004, available at http://www2.gtlaw.com/pub/Alerts/2004/vanzutvena_06.asp, 1-6

Bibliography

Zymler M., Tacit Collusion: A Solution In Search Of A Problem, 2011, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1751545, 1-9